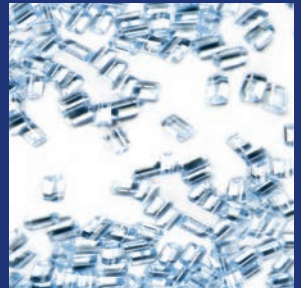




PLASTICS MATERIALS AND MACHINERY EXPORT GUIDE

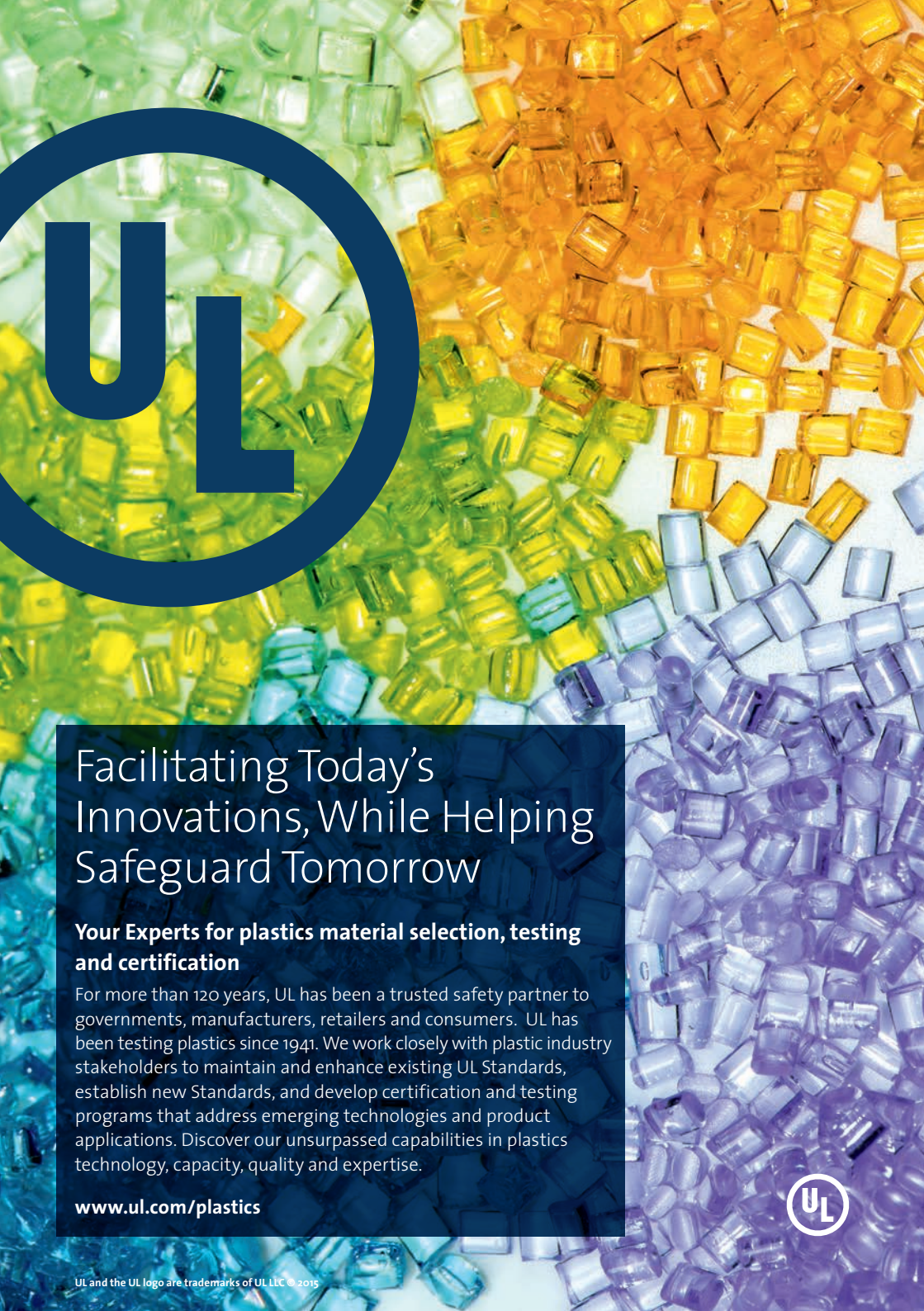
A Reference for U.S. Exporters
in the Plastics Industry



Prepared by:

U.S. Commercial Service, Commercial Specialists
and the CS Manufacturing Team

March 2015



Facilitating Today's Innovations, While Helping Safeguard Tomorrow

Your Experts for plastics material selection, testing and certification

For more than 120 years, UL has been a trusted safety partner to governments, manufacturers, retailers and consumers. UL has been testing plastics since 1941. We work closely with plastic industry stakeholders to maintain and enhance existing UL Standards, establish new Standards, and develop certification and testing programs that address emerging technologies and product applications. Discover our unsurpassed capabilities in plastics technology, capacity, quality and expertise.

www.ul.com/plastics



TABLE OF CONTENTS

U.S. Commercial Service Support for U.S. Exporters	4
Country Snapshots:	
European Union	8
Argentina	12
Brazil	16
China	20
Croatia	27
Czech Republic	31
Egypt	34
France	36
Germany	43
Hungary	49
India	52
Israel	58
Jordan	63
Kazakhstan	66
Mexico	76
Poland	80
Russia	85
Spain	91
Sweden	94
Turkey	97
United Kingdom	101
Vietnam	106
U.S. Commercial Service Offices in the United States	112



U.S. COMMERCIAL SERVICE SUPPORT FOR U.S. EXPORTERS:

The U.S. Commercial Service is the export promotion agency of the United States Department of Commerce. We provide a wide range of services and programs to help U.S. companies increase their sales of goods and services to foreign markets. Our U.S. trade specialists and foreign commercial specialists will assist you in identifying trade opportunities, finding local business partners, launching your company, promoting your products and services, obtaining valuable market research reports and protecting your intellectual property rights. U.S. Commercial Service trade specialists in over 100 U.S. cities and in nearly 80 countries stand ready to help you get started in exporting or increasing your sales to foreign markets.

WHY U.S. EXPORTERS SHOULD WORK WITH US:

- Our specialists will assess markets of opportunity and connect you with qualified distributors and partners.
- Through our customized programs, such as the International Partner Search or the Gold Key Service, we can connect you to potential partners.
- Our overseas specialists can provide you with market research, industry-specific or custom-tailored information on growth sectors, local competition etc.
- Our services will help you maximize your time at international trade shows, including matchmaking and pre-show promotional programs.
- We can assist you to overcome trade obstacles and provide guidance on trade financing.

To learn more about what we can do for you and to find market research, find trade events, trade leads, and information on how to export, please visit www.export.gov.
Contact us today to connect with a world of opportunity.

ABOUT THE MARKET BRIEFS:

This is a "Plastics Market Briefs" booklet produced by the U.S. Commercial Service. It contains insights into important markets for U.S. firms. The purpose of this booklet is to provide market intelligence to support U.S. companies in the plastics industry who are interested in entering new markets with enormous export potential. We hope this booklet will be a source of practical, hands-on information. These market briefs were written by the commercial specialists responsible for the plastics sector in their respective countries. Their contact information can be found on top of each market brief. Please feel free to contact us for further information.

NOTE: The information contained in this booklet is intended to be a basic market snapshot for U.S. exporters of plastics/rubber materials and machinery. It is not a comprehensive market report.

We would like to thank our sponsor, Underwriter Laboratories and the contributing partners for making this booklet possible.



FREE TRADE AGREEMENTS

If you are looking to export your product or service, consider export markets with which the United States has negotiated a Free Trade Agreement (FTA). FTAs have proven to be one of the most effective ways for U.S. exporters to access foreign markets, making it easier and cheaper for U.S. businesses. These agreements provide a competitive advantage versus products from other economies because they reduce tariffs and barriers to U.S. exports, protect U.S. interests, and enhance the rule of law in the FTA partner country. In 2013, the United States exported \$33.7 billion in plastic materials and products to our 20 FTA partners, up 4 % from 2012 shipments. FTA trade in these goods favored the United States, giving us a trade surplus of \$15.8 billion and accounting for 57.8% of total U.S. plastic materials/products exports.

U.S. FTA PARTNER COUNTRIES

As of January 1, 2014, the United States has 14 FTAs in force with 20 countries.

- Australia
- Bahrain
- Chile
- Colombia
- DR-CAFTA:
Costa Rica, Dominican Republic,
El Salvador, Guatemala, Honduras
& Nicaragua
- Israel
- Jordan
- Korea
- Morocco
- NAFTA:
Canada & Mexico
- Oman
- Panama
- Peru
- Singapore

Information on these countries is available from
<http://www.export.gov/> (followed by the respective country of interest).

FTA TARIFF TOOL

To determine if your product qualifies for preferential tariff treatment under any of these FTAs, the International Trade Administration (ITA) has developed the FTA Tariff Tool. The FTA Tariff Tool provides a searchable database for the relevant tariff/rule of origin requirements for any product (agricultural or industrial). In addition, it generates market access reports/charts across industrial sectors or product groups and creates a snapshot of current tariff and trade trends under the different U.S. FTAs. The Tool can be accessed from <http://www.export.gov/FTA/FTATariffTool/>. The website also contains an instructional video, quick start guide, and user's manual.

THE EUROPEAN UNION

THE EUROPEAN UNION



CAPITAL Brussels
POPULATION 508 million (28 member states)
GDP US\$ 16.36 trillion (2012 est.)
CURRENCY Euro
LANGUAGE 24 languages



U.S. Commercial Service Contact Information

NAME Matthew Kopetski
POSITION Commercial Specialist
U.S. Mission to the European Union
EMAIL matthew.kopetski@trade.gov
PHONE +32 (0)2 811-5684

SUMMARY

Several pieces of EU legislation effect the manufacture, import and sale of plastics. The most comprehensive and extensive of these regulations is REACH, the EU regulation on chemicals and their safe use (EC 1907/2006). REACH applies to the entire plastic supply chain including additives producers, plastics producers, manufacturers of finished goods using plastics, and, in some cases retailers.

WHAT IS REACH?

REACH, the acronym for **R**egistration, **E**valuation, **A**uthorization, and restriction of **C**hemicals, is the basic EU regulation applying to chemicals. The legislation entered into force on June 1, 2007, and it applies throughout the EU as well as in Iceland, Liechtenstein, and Norway. The purpose of REACH is to enhance protection of human health and environment by encouraging communication throughout the supply-chain on the chemicals used in products and promoting the use of substances with low toxicity. REACH, which is managed by the European Chemicals Agency (ECHA), imposes obligations on all companies active in the EU market that use chemical substances.

REACH REGISTRATION

All manufacturers and importers of substances in quantities higher than 1 metric ton per year must register their chemicals by submitting a dossier to the European Chemical Agency (ECHA). One key principle of REACH is “no data, no market.” This means that companies manufacturing or importing chemical substances subject to the regulation may not place products on the EU market without first having registered them with ECHA. For more information on how to submit a registration dossier, see the ECHA website: <http://echa.europa.eu/web/guest/reach-2013>.

THE CANDIDATE LIST OF SUBSTANCES OF VERY HIGH CONCERN

The REACH Candidate List currently contains 155 substances of very high concern. It is important that U.S. exporters monitor the Candidate List, which is updated twice a year, because it triggers legal obligations for such companies. Manufacturers and importers of finished products that contain substances included in the Candidate List have an obligation to notify ECHA and to inform customers of the presence of these substances in the products (REACH Articles 7 and 33). In addition, the EU will eventually require manufacturers and importers to obtain pre-market authorizations.

The Candidate List includes many chemicals of interest to the plastics industry, such as phthalates, flame retardants, and monomers:

<http://echa.europa.eu/web/guest/candidate-list-table>.

REACH also maintains a list of chemical substances subject to restrictions. This list is located on the ECHA website:

<http://echa.europa.eu/web/guest/addressing-chemicals-of-concern/restrictions/list-of-restrictions>

REACH-COMPLIANT MATERIAL SAFETY DATA SHEET (MSDS)

The safety data sheets remain the primary means for hazard communication in the supply chain of chemical products. All safety data sheets must meet the latest requirements of the REACH regulation. See guidance on the compilation of safety data sheets:

http://echa.europa.eu/documents/10162/17235/sds_en.pdf

LEGISLATION IMPACTING THE PLASTICS INDUSTRY

The REACH legal text – Regulation EC 1907/2006:

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32006R1907:EN:NOT>

Classification, Labeling, and Packaging of Substances and Mixtures Regulation (CLP Regulation):

CLP is the new EU regulation that implements the United Nations' system of classification and labeling in Europe.

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:353:0001:1355:en:PDF>

Guidance on the CLP regulation:

<http://ec.europa.eu/enterprise/sectors/chemicals/documents/classification/>

Sector-specific legislation relevant to the plastics industry:

Commission Regulation (EU) No 1282/2011 on plastic materials and articles intended to come into contact with food: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32011R1282:EN:NOT>.

THE EUROPEAN UNION

Toy Safety Directive 2009/48/EC:

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:170:0001:0037:en:PDF>

Restriction of Hazardous Substances Directives (ROHS)

ROHS I – Directive 2002/95:

http://eur-lex.europa.eu/LexUriServ/site/en/oj/2003/L_037/L_03720030213en00190023.pdf

ROHS II – Directive 2011/65:

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:174:0088:0110:EN:PDF>

For further information about the ROHS directives, please visit the U.S. Commercial Service website:

<http://export.gov/europeanunion/weerohs/rohsinformation/index.asp>

ADDITIONAL INFORMATION

The **U.S. Commercial Service** EU REACH website contains information on the latest REACH developments, and it posts regularly information on REACH workshops and webinars organized by the U.S. Government: <http://export.gov/europeanunion/reachclp/index.asp>

The U.S. Commercial Service at the U.S. Mission to the European Union can be contacted via e-mail at: matthew.kopetski@trade.gov; phone: +32 2-811-5684; or fax: +32 2-811-5151. You can also visit our website: <http://www.export.gov/europeanunion>.

List of REACH business service and solution providers:

http://export.gov/europeanunion/reachclp/reachbusinessserviceandsolutionproviders/eg_eu_030372.asp

EU Institutions for Guidance on REACH Compliance:

European Chemicals Agency (ECHA) website:

<http://echa.europa.eu/web/guest/support/guidance-on-reach-and-clp-implementation>

DG Environment website covering REACH:

http://ec.europa.eu/environment/chemicals/reach/reach_intro.htm

DG Enterprise & Industry website covering REACH:

http://ec.europa.eu/enterprise/sectors/chemicals/reach/index_en.htm

THE EUROPEAN UNION

European Trade Associations have developed their own REACH Web pages and REACH compliance tools:

Plastics Europe:

<http://www.plasticseurope.org/>

European Chemical Industry Council (CEFIC):

<http://www.cefic.org/>

ARGENTINA

ARGENTINA



CAPITAL Buenos Aires
POPULATION 42 million
GDP US\$ 488 billion (est. 2013)
CURRENCY Argentine Peso (ARS)
LANGUAGE Spanish



U.S. Commercial Service Contact Information

NAME Liliana Paz
POSITION Senior Commercial Specialist,
U.S. Embassy – Buenos Aires, Argentina
EMAIL Liliana.Paz@trade.gov
PHONE (54-11) 57774519

SUMMARY

In Latin America, Argentina remains a key market for U.S. exports. However, recent controls have made exporting goods from any country to Argentina more difficult as the Argentine Government has implemented more processes that companies must complete in order to import goods into the country. These restrictions on imports and on dividend transfers, to retain highly-needed foreign exchange, have impacted trade.

Argentina's plastics sector is one of the most important to the economy, representing 1.6 percent of the GDP in 2013. Both local production and imports have increased in recent years (despite a slight drop between 2012 and 2013) in order to cover demand. While production is mainly for domestic consumption, exports have been around 10 percent. Imports of raw materials amounted to US\$1.67 billion in 2013, while imports of semi-finished and finished goods amounted to US\$1.2 billion in 2013. Imports of capital equipment amounted to US\$214 million in 2013.

High-technology products that include modern equipment and accessories are mostly imported. U.S. exporters may continue to find opportunities in these industry niches but market potential be determined on a case-by-case basis.

MARKET ENTRY

Companies intending to export to Argentina need to ensure that their customers fulfill all import requirements before they ship any product and must be careful to follow all regulations precisely.

U.S. companies exporting to Argentina typically market their products and services through Argentine agents, representatives and distributors. U.S. companies must consider Argentina's unique economic, demographic, and cultural characteristics that distinguish it from other Latin American countries. The U.S. Commercial Service can help identify a potential distributor through one of our matchmaking services.

An important component of the marketing mix is promotion. Companies are encouraged to attend or exhibit at local and regional trade shows as well as visit trade shows in the U.S. attended by Argentine buyers. It is also important to protect your intellectual property and engage qualified local professionals and lawyers in contract negotiations.

CURRENT DEMAND

Per capita plastic consumption quadrupled from 11 kg in 1990 to 44 kg in 2013. The local industry utilized 1.36 million tons (est.) of raw materials in 2013, while imports of raw materials reached 807,600 tons, representing US \$1.67 billion. However, domestic production and imports figures fell between 2012 and 2013, due to poor overall economic conditions in Argentina.

During 2013, imports of plastic raw materials, semi-finished, and finished products decreased three percent and 12 percent respectively from 2012 figures. However, imports of capital goods increased five percent in 2013 following an 8.5 percent fall in 2012.

The U.S. is the second largest exporter of plastic raw materials to Argentina, with 27 percent of the import market, and is the fourth largest exporter of semi-finished and finished plastic products, with a 10 percent import market share. However, its market share fell from 5.7 percent to two percent in 2013 in exports of capital goods (machinery, equipment, parts, molds and matrixes).

Imports of industrial plastic-processing machinery and equipment, parts and pieces, molds and matrixes totaled US \$214 million, up 5.3 percent over 2012. Investment in equipment and machinery totaled US \$3.15 billion over a 20 year period.

Machinery and equipment, particularly in injection, extrusion, blow-molding, thermoforming and printing, represented 54 percent of these imports in 2013, mainly coming from Europe and Asia, with the U.S. retaining a two-percent market share. Molds and matrixes represented 35 percent of these imports, with 3.2 percent coming from the U.S. Parts and pieces represented 11 percent of imports in this category.

Injection molding is the first most important plastic-transforming activity in Argentina. Plants transforming plastic through injection operate in industries such as packaging (45 percent), with construction (tubes) and electrical industries occupying the 2nd and 3rd largest applications, at 13 percent and 10 percent respectively. Auto parts, sporting goods, and leisure goods are also important. Approximately 90 percent of injection molding equipment is imported, which amounted to US \$47 million in 2013.

Import potential may depend on the targeted market. Higher-end technology products may have more opportunities for imports, since there may not be a local substitute. However, current demand is highly conditioned by the restrictions the government places on all imports.

MAIN COMPETITORS

As of 2013, there were 2,795 plants, primarily concentrated in the province of Buenos Aires, employing 35,000 workers. The majority of firms are small and medium-sized, with only five percent employing more than 50 workers.

In general, local companies produce lower-quality products than U.S. companies. Local machinery is generally positioned in a different and less-demanding segment (low cost and performance). However, in this niche, Argentine products are often preferred because of the recent restrictions on imports. The easier availability of post-sales service and, parts, and the possibility of a closer relationship with the supplier is an important factor in the local culture.

Brazil has traditionally been the largest exporter of raw plastic materials to Argentina, followed by the U.S., which exports to Argentina approximately 200,000 tons annually. Imports of semi-elaborated and finished plastic products into Argentina also come largely from Brazil, closely followed by imports from China.

Regarding equipment, there are essentially no foreign companies established in Argentina that produce injection-molding equipment. U.S. injection machinery usually competes with similar products from Italy, Germany and Austria in terms of quality and price. However, Chinese sales have been growing significantly in recent years and have become market leaders in overall equipment imports.

MARKET ISSUES AND OBSTACLES

There are significant trade and import barriers that the Argentine government has implemented in an effort to protect domestic industries. Prior approval from the Administración Federal de Ingresos Públicos (AFIP- Argentine Tax and Customs Authority), which reviews and approves the mandatory sworn affidavit of intention to import (referred to as the DJAI), is required for each import shipment.

It is important for would-be exporters to confirm prior to shipping goods to Argentina that their Argentine customer has received this necessary permission to import and also received an approval to access the foreign exchange market through applications on the Argentine Tax and Customs Authority website if required. They should contact the U.S. Commercial Service in Argentina for advice regarding the import process.

TRADE EVENTS

Name of Event: Argenplás

Date: June 13-16, 2016

Location: Centro Costa Salguero, Buenos Aires, Argentina

Website: <http://www.argenplas.com.ar/en/>

Description: Argenplás, held in Argentina every two years, is the most important event for Spanish speaking countries in the Americas. In 2014, it hosted the 3rd Congress of the Plastic Industry in the Americas and the 1st Latin-American Congress on the plastic industry.

AVAILABLE MARKET RESEARCH

CAIP – Argentine Plastics Industry Chamber:

www.caip.org.ar



CAPITAL Brasilia
POPULATION 202 Million
GDP US\$ 2.3 Trillion
CURRENCY Real
LANGUAGE Portuguese



U.S. Commercial Service Contact Information

NAME Luciana Escobar
POSITION Commercial Specialist
EMAIL Luciana.Escobar@trade.gov
PHONE 55/11/3250-5022

SUMMARY

The Federative Republic of Brazil is Latin America's largest economy. With 3,290,000 square miles, bordering 10 other countries and with 4,650 miles of coastline, Brazil is the largest country in Latin America and fifth largest in the world. Its population of 202 million makes Brazil the world's sixth-most populous nation. With a Gross Domestic Product (GDP) in 2013 of US\$ 2.3 trillion, Brazil is the world's seventh-largest economy, spurred by a 2.5% annual growth during 2013. Growth slowed during last year due to reduced demand for Brazilian exports in Europe and Asia and modest consumer demand from Brazil's large middle class. By 2020, Brazil is projected to be the fifth-largest consumer market in the world, ahead of France and the United Kingdom.

During the past decade, the country has maintained macroeconomic policies that control inflation and promote economic growth. Inflation was 6.3% in April 2014. Urban unemployment was at 4.9% in April 2014, dropping from 6% in mid-2013; wages continue to increase. Interest rates are high by international standards: Brazil's Central Bank benchmark rate was at a historic low of 7.25% in October 2012, but as of May 2014 had climbed to 11%, which is still low by Brazilian standards.

In 2013, the U.S. was Brazil's second largest source of imports, accounting for 15% of total imported goods, behind China and followed by Argentina, Germany and Nigeria. In 2013, Brazil imported over US\$ 239 billion of total goods, including US\$ 44 billion from the U.S. – a modest 0.7% increase over 2012. Brazil was the United States' seventh-largest export market for goods in 2013. Brazil is also a large market for U.S. services, accounting for an additional \$24 billion in exports in 2012 (latest available data). The trade balance with Brazil for U.S. services has continually increased since 2003, reaching a surplus for the U.S. of \$ 17 billion as of 2012.

MARKET ENTRY

International companies will need a strong presence and must invest time in developing relationships in Brazil. The U.S. Commercial Service encourages U.S. companies to visit Brazil to meet one-on-one with potential partners. One of the best ways to enter the Brazilian market is by attending a local trade show or using the U.S. Commercial Service's Gold Key Service (GKS). The U.S. Commercial Service can provide business counseling or arrange meetings with potential buyers through a GKS or during a trade show. Capital goods and technical instrumentation manufacturers that wish to export to Brazil should locate a qualified agent or distributor, capable of providing after-sales services. Several U.S. machine manufacturers have sales offices in Brazil.

CURRENT DEMAND

The plastics sector has over 11,000 companies throughout Brazil. In general, the sector is comprised of micro and small enterprises, which reflects a high rate of entrepreneurship as well as the presence of family-owned businesses. There are also over 700 medium and large enterprises, which dictate the sector's growth and technological dynamism. Additionally, many of these companies belong to multinational corporations that produce on a global scale – such as automotive, food and beverages – and conform with strict production and quality standards required worldwide. This demonstrates the competence of the Brazilian companies.

The plastics sector employs 357,626 workers. It is the third largest employer in the manufacturing industry, behind only the garment/accessory and meatpacking sectors.

In 2013, sales revenue of the plastics-transformation sector in Brazil totaled US\$ 26.78 billion. The consumption of plastics products in Brazil was at R\$ 27.96 billion, an increase of 7.6% compared to 2012. Imports of plastics products totaled US\$ 3.9 billion and exports reached US\$ 1.3 billion. Exports and imports of processed plastics in 2013 were respectively 246 and 732 (thousands of tons). In 2013, imports of plastic products increased by 7.1% (variation due to exchange rate with the U.S. dollar), while exports increased by 4.1%. The import coefficient of the sector has been growing every year, and currently stands at 12%; while the export coefficient has been constantly decreasing, reaching 4.6% in 2013. The main processed plastic items exported by Brazil are: plastic pipes, plastic plates, sheets, film, strips and foil, and non-cellular plastics. Among the leading imported plastic products are: carboys, bottles, jars and similar items, other plates, sheets, strips, films and other self-adhesive and flat shapes; other non-cellular polypropylene products; and stoppers, lids and capsules. The United States is second only to China as the principal supplier of imports of processed plastics to Brazil.

Plastics Machinery: Approximately 70% of the machinery used in Brazil's plastic conversion industry – for example, injection molding and blow molding – is imported. The remaining 30% of the machinery is manufactured locally by four to five Brazilian companies that account for 80% of the locally-produced machinery. These manufacturers wield influence in the domestic market and have an upper

hand over buyers of these machines. Thus, the increasing demand for plastic products at competitive prices and at necessary production and quality standards could be met by increasing the imports of plastic machinery from other countries due to limited capacities of local equipment manufacturers.

Brazil's Current Imports: Brazil currently imports equipment from countries such as Germany, China and the U.S. Currently, 37% of imported injection-molding machines are from China and 17% come from Germany. For blow-molding equipment, 34% are from Germany and 5% from China. Currently, more than \$355 million is being spent on importing injection molding, blow molding and thermoforming machines alone.

MAIN COMPETITORS

Domestic Competition: There are about 80 manufacturers of machines and accessories for the plastics industry established in Brazil, in the extrusion, injection, blow molding, cutting and welding, printing, thermoforming, recycling and machine accessory business. These companies are members of the Brazilian Association of Machine Manufacturers. Information on the companies is available from: <http://www.camaras.org.br/site.aspx/Associadas-da-CSMAIP>

International Competition: Major international plastic machine manufacturers are present in Brazil, with manufacturing facilities, sales offices or through commercial representatives. In order to avoid the strong competition of local producers and the established local representatives of imported machinery in Brazil, import representatives tend to search for niche products whose number of suppliers is smaller than conventional machines, thus increasing the profit margins for the representatives.

MARKET ISSUES AND OBSTACLES

There are no restrictions to the importation of products in Brazil. The import tariff on most machines imported into Brazil is at 14%, however other taxes and costs related to importing into Brazil, increase the final prices of imported machinery by about 60% - in order to stimulate Brazilian industries to invest in technologies not available in Brazil that will enable production of higher quality products and generate future exports. The Brazilian Government has reduced the import tariff of various industrial machinery to 2% (ex-tarifario) for a limited period of time.

Doing business in Brazil requires knowledge of the local environment, including both the explicit as well as implicit costs of doing business (referred to as the "Custo Brasil"). Such costs are often related to distribution, government procedures, employee benefits, environmental laws, and a complex tax structure. Logistics pose a particular challenge, given the fragmented nature of distribution channels. Besides facing tariff barriers, U.S. companies will find a complex customs system, and an overloaded legal system with a lengthy process for enforcing IPR and commercial law.

TRADE EVENTS

Name of Event: Interplast
Date: August 2016 (TBC)
Location: Complexo Expoville – Joinville, Santa Catarina
Website: <http://www.interplast.com.br/en/>
Description: Bi-annual trade show - the fair is held in the second largest plastics market in South America, a region that has a significant number of global brands producing for various applications in industries such as automotive, home appliance, construction, furniture, cosmetics and personal care, pharmaceutical, packaging and housewares, forming an extensive supply chain. Various-sized companies bring to the event important launches, innovative products and special services.

Name of Event: Feiplastic
Date: May 2015
Location: Anhembi Exposition Center – São Paulo, SP
Website: <http://www.feiplastic.com.br/en/home/>
Description: Bi-annual and the largest trade show in Latin America, Feiplastic is one of the top trade shows in the plastics industry for introducing trends, showcasing launches and generating networking

AVAILABLE MARKET RESEARCH

ABIPLAST – The Brazilian Association of Plastics Transformers publishes statistics on the plastics industry in Brazil.
www.abiplast.org.br



CAPITAL Beijing
POPULATION 1,368,130,000
GDP US\$ 9.4 trillion (2013)
CURRENCY Renminbi (RMB)
 or Yuan (US\$=RMB 6.2 Yuan in 2013)
LANGUAGE Chinese



U.S. Commercial Service Contact Information

NAME Sophie Xiao
POSITION Commercial Specialist
EMAIL sophie.xiao@trade.gov
PHONE (86-20) 3814 5613

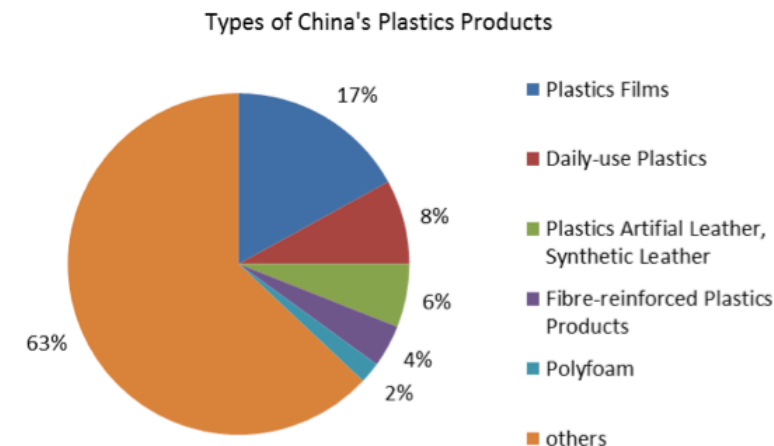
SUMMARY

China is currently the third largest export market for U.S. goods (after Canada and Mexico), and the United States is China's largest export market. Two-way trade in goods between China and the United States has grown from \$33 billion in 1992 to over \$536 billion in goods in 2012. The Chinese government recently introduced an ambitious agenda to restructure the Chinese economy and fully embrace the market as the "decisive force" in the country's economic future. Accordingly, China's plastics industry is undergoing a critical stage of upgrading its structure.

In 2010 China became the largest consumer and producer of plastics in the world and accounts for one fourth of total global sales of plastics products. China's plastics industry recorded a double-digit growth rate before 2012 and maintained a steady growth rate of over 8% in 2012 and 2013. According to the "China Plastics Industry Yearbook", the industry employed more than 2.3 million persons in 2012. The plastics processing industry is one of the fastest growing, mainstay industries in China, with a total output value of 3.55% of China's GDP in 2010. Due to the large domestic demand, China's plastics industry will continue to increase.

Plastics products: In 2013, China reported production of 61.9 million tons of plastics products. It generated revenue from principal business of RMB 1868.644 billion yuan (USD 301.39 billion), an increase of 14.26%. China imported 24.62 million tons of plastics in primary forms valued at USD 49.1 billion and exported 8.96 million tons of plastic products with a value of USD 35.3 billion. Chinese exports of plastics represent 11.6% of total production.

A breakdown of the types of plastics products in 2013 follows:



Plastics production is mainly concentrated in east and south China with five major provinces (Zhejiang 15.2%, Guangdong 13.9%, Shandong 8.1%, Henan 6.9% and Liaoning 5.8%) that accounted for 49.9% of China's total output of plastic products in 2013. There were 10 provinces in China that produced over two million tons of plastics products in 2013.

China consumed over 60 metric tons of plastics in 2012. Synthetic resin consumption by industry is as follows: building materials (32%), packaging materials (31%), agriculture (9.6%), electronics/electrical appliances (7.8%), household goods (5.6%), clothing & shoes (2.4%), automotive (2.4%), furniture (3.2%), toys & entertainment goods (3.1), mining and other accessories (1.8%), and medical devices (1%). Domestic consumption of synthetic resin is approximately 65%. Engineering plastics has seen rapid growth in China with huge market potential, especially in the application of the auto industry. China supplied about 40% of domestic consumption of engineering plastics.

Plastics machinery: China is the world's largest market for plastics equipment. "China Plastics Industry Yearbook 2013" reported that China produced about 270,000 sets of plastics machinery in 2012, with the value of gross output at RMB 46.206 billion yuan (USD 7.45 billion). The total output of plastics machinery in 2013 was not available from public sources, but the value of gross output reached RMB 52.6 billion yuan (USD 8.48 billion) in 2013, increasing by 14%. China-made plastics machinery accounts for 77% of the total domestic plastic machinery market. More and more global plastics equipment makers have built factories in China and local companies have obtained more sophisticated technologies over the years.

MARKET ENTRY

Representation in China by a Chinese agent, distributor or partner who can provide local knowledge and contacts is critical for success. The megacities of China - Beijing, Shanghai, Guangzhou, and Shenzhen - remain common points of market entry. Tier 2, 3, and even 4 cities also offer many competitive advantages for U.S. businesses. The U.S. Department of Commerce, United States Foreign Commercial Service (USFCS), has six offices in China, located in Beijing, Shanghai, Guangzhou, Shenyang, Chengdu, and Wuhan City, offering customized solutions to help U.S. companies, including small- and medium-sized enterprises, succeed in the China market.

Among USFCS's six offices in China, Guangzhou and Shanghai are more suitable to address U.S. plastics firms' export efforts because China's plastics production is concentrated in the south and east of China (under the two offices' Consulate District jurisdiction). Furthermore, ChinaPlas, the world's second-largest trade show in the plastics & rubber industry, is held in Guangzhou and Shanghai by rotation each year. U.S. firms can leverage this trade show for market entry and market expansion.

U.S. firms can purchase USFCS's Gold Key Service to identify and meet key market players to break into the Chinese market, then further engage USFCS's other services or programs (e.g., trade shows and trade missions) to promote their products or company in China's market. Due to the huge and complex market in China, one start-up partner is necessary but essentially not enough. Multiple partners in China are needed to address different market demands in order to succeed.

Due diligence of potential partners or buyers, IPR protection, language, management of multiple partners such as agents or distributors, export financing, customs, and long-term business strategy are all factors to be considered before entering the China market. Direct purchase, B2B marketplaces and/or marketing via wholesalers, distributors or agents are common distribution channels in China. Price, product quality, prompt after-sale service and supplier reliability are important buying factors, especially price. A Chinese-language company brochure or product literature are highly recommended.

Import Taxes:

A standard value-added tax of 17 percent is applicable to all goods.

Customs Duties:

H.S. 8477: relating to plastic machinery like injection molding, extrusion, and blowing molding, import duties range from 0% to 5% depending on the equipment.

H.S. 8465: relating to machine tools. Import duty is 10%.

H.S. 3901-3915: relating to plastics resin in primary forms, import duties range from 3% to 14% depending on the resin. Most resins are subject to 6.5%.

H.S. 3916-3926: relating to plastics products, import duties range from 3% to 10%. Most products are subject to 6.5% and 10%.

CURRENT DEMAND

Owing to the abundant labor resources, low labor costs and the introduction of foreign advanced equipment and technology, China's plastics industry experienced explosive growth in the past decades.

The plastics industry in China is entering a new stage for structural optimization and industry upgrading driven by technological progress and innovation. China is seeking common and pivotal technology breakthroughs, such as application of supercritical foaming techniques, large caliber crosslinking PE pipes, processing of UHMWPE pipes, waterborne polyurethane synthetic leather, modified PVC pipe, foaming agent without HCFCs and new energy-saving techniques.

China would like to develop new plastics materials with functional technique and nano-materials technology. Following are some key research areas:

- High-performance engineering plastics, such as high-barrier, multilayer, co-extrusion nano-microlayer composites, functional fiber-reinforced composites, polymer alloy;
- Functional materials, such as melt-electrospinning filter materials, nano-antibacterial, flame-retardant and degradable materials;
- Multifunctional film materials like photovoltaic generation-related material, battery diaphragm of NiMH batteries and lithium-ion batteries, nimh batteries, lithium-ion batteries, optical film;
- Research of ultrathin film materials and combinations.

In 2012, China was able to supply about 65% of domestic consumption on synthetic resin and about 40% of domestic consumption on engineering plastics. The rest relied on imports. Some China imported items include imperative special resin, resin of some upscale products such as special pipes and upscale films, plastics additives, especially environmental and health-safe plastic additives, high-performance engineering plastics, biodegradable plastics, nano-composites and wooden plastics-composite, insulation materials, quality-control equipment such as measurement and testing instruments, and post-industry waste plastic materials, and so on.

China's plastics machinery industry has averaged a 20% annual growth rate in the past decade. The industry mainly consists of three types of plastics machinery; namely, injection molding, extruder, and blowing molding machinery. China currently is the largest producer of injection molding machinery in the world, but the production value is behind that of Europe and Japan. Injection molding accounts for 70% of plastics machinery market. The year 2012 and 2013 were the first two years that China carried a trade surplus in injection molding machines.

China seeks automation technology to upgrade its plastic machinery products. For instance, most of China made injection molding machines use PLC-controlled system while the world's more advanced control technology is the use of real-time closed-loop control box CRT or LCD-monitor process monitoring for injection molding machine. China will follow the trend and upgrade its injection molding

machinery, which will lead to the demand of ultra-small, high-precision, ultra-high-speed, high-level of control of plastic machinery. High performance, energy efficiency, high-speed, large scale, micro, fully automatic injection molding machines, double-screw extruder, and foam pelletizers are needed in China. In addition, the demand for upgrading existing injection molding machinery is also increasing rapidly, bringing in business opportunities for auxiliary and peripheral equipment market. Equipment to handle recycling materials is also on high demand.

MAIN COMPETITORS

Domestic Competition:

There are 13,699 enterprises above the designated size producing plastics products, and 376 enterprises above the designated size producing plastics machinery in China by the end of 2013, according to national statistics report (Note: Enterprise above designated size is a statistical term used by the Chinese government since 1996, the threshold is that an enterprise need to generate revenue from principle business at and above RMB 20 million/USD 3.23 million). There are thousands and thousands of small and medium-size enterprises in the plastics industry not included in the statistics. The huge and complex Chinese market offers various business opportunities for all kinds of companies at home and abroad. Local companies have grown quickly and acquired sophisticated technology through the development over the years. Competition is inevitable and fosters the rapid development of the industry.

International Competition:

China's market is full of international brands and products. In 2013, China imported 24.62 million tons of plastics in primary forms valuing at USD 49.1 billion while South Korea, Taiwan, Japan, the United States, Singapore, Saudi Arabia, Thailand, Germany are key suppliers of plastics materials to China. According to Chinese customs, China imported 10,052 sets of plastics machines with the value at USD 1.82 billion while Japan, Germany, Taiwan, South Korea, Italy, the United States, Netherlands, France are key plastic machinery suppliers to China. The plastics machines imported from the United States accounted for 3.37% of China's total import of plastics machinery.

U.S. companies have best market opportunities if they offer innovative materials or substances to enhance plastics or the processing of plastics. Chinese companies are constantly trying to improve their products. Chinese companies like to turn to U.S. companies for innovative technology and products such as energy-saving production solutions, new and lightweight materials, bio-based polymers, plastics recycling technology/equipment, engineering plastics and manufacturing equipment, etc.

MARKET ISSUES AND OBSTACLES

The World Bank recently ranked China 96th (out of 189) in its Ease of Doing Business Report. Regardless, China is a market full of opportunities and challenges. The Chinese government frequently updates policy and regulations related to plastics industry, such as import/export license, industry standards, pollution control regulations on processing waste plastics, investment guideline, HS code, dual-usage products/technology, etc. In 2013, the Chinese government tightened the inspection procedures on scrap materials. The so-called "Operation Green Fence" is intended to curb the amount of solid-waste contamination that the country imports. It involves stricter enforcement of quality requirements for imported recovered materials, but no legislation. Therefore, it is critical to have representation in China or work with local partners to keep updated on all changes.

TRADE EVENTS

Name of Event: ChinaPlas2015
Date: May 20-23, 2015
Location: Guangzhou, China
Website: www.chinaplasonline.com
Description: ChinaPlas is the second largest exhibition in the world for the plastics industry. It is held alternately in Guangzhou and Shanghai. In 2014, the show was held in Shanghai, attracting over 130,000 visitors and 3,067 exhibitors from 40 countries and regions. ChinaPlas has been organized by the Hong Kong-based Adsale Exhibition Services Ltd. for over 20 years.

Name of Event: China Coat 2015
Date: November 18-20, 2015
Location: Shanghai, China
Website: www.chinacoat.net
Description: China is the world's largest producer and end-user of coatings. CHINACOAT is the world's coatings show, organized since 1996, and now alternates annually between Guangzhou and Shanghai. It is the major trade event for the coating and paint industries, as well as adhesives, sealants and construction chemicals. In 2013, China Coat in Shanghai achieved a record attendance of 25,736 trade visitors and 1,019 exhibitors.

CHINA

AVAILABLE MARKET RESEARCH

China: Country Commercial Guide 2014

China: China Business Handbook 2013

Major Chinese Plastics Industry Associations:

China Plastics Processing Industry Association (<http://www.cppia.com.cn/>)

China Plastics Machinery Industry Association (<http://cpmia.org.cn/>)

China Synthetic Resin Supply and Sale Association (<http://www.csra.org.cn/>)

Shanghai General Plastics Association (www.sspi.com.cn)

Guangdong Plastics Industry Association (www.gdpia.com)

CROATIA



CAPITAL Zagreb

POPULATION 4.256 million

GDP US\$ 78.9 billion (PPP)

CURRENCY Kuna (HRK)

LANGUAGE Croatian



U.S. Commercial Service Contact Information

NAME Suzana Vezilic

POSITION Commercial Specialist

EMAIL Suzana.Vezilic@trade.gov

PHONE +385 1 661 2200 ext. 2020

SUMMARY

With Croatia's EU accession on July 1, 2013, the need for duplicative testing of products and additional customs clearance for distribution of goods and services between the EU countries and Croatia was eliminated. U.S. companies already exporting to the EU will now have an additional market opportunity, accessible without any much further administrative burden.

As a result of the negotiations held for Croatia's accession to the EU, there was an additional impetus for the Croatian Government to take measures in recent years to address corruption and bureaucratic and judicial inefficiencies. The current Croatian Government (elected in December 2011) has demonstrated its determination to further strengthen these reforms as well as to find new and more effective ways to consolidate public spending, improve the business climate and foster economic growth.

The country's population of roughly 4.5 million is largely homogenous in ethnicity, language and religion. In the summer months its numbers are doubled by tourists from throughout Europe and the world, thus making it a cosmopolitan market for products and services. Its ports and transportation infrastructure make Croatia a natural trade gateway into southeast Europe. In brief, Croatia is a market of opportunity, but one that should be entered with due diligence.

The Croatian rubber and plastics industries rely heavily on imported raw materials. Croatia imported approximately \$877 million worth of plastics and \$209 million worth of rubber products in 2012. Key areas of growth in Croatian imports are in the pneumatic rubber tire industry and plastic packaging industry. An overview of the Croatian plastics and rubber industries is provided below:

Industry income	USD 795 Million (2011)
Total number of employees	7,119, 3.1% of total work force (2012)
Number of active companies	647 firms – 2 large, 19 medium, 626 small (2011)
Plastic imports	\$ 877 Million (2012)
Rubber imports	\$ 209 Million (2012)
Value of exports	\$ 217 Million (2012)
Share of total exports	1.7%
Industry's share of GDP	0.8%

MARKET ENTRY

With Croatia's accession into the EU on July 1, 2013, U.S. companies based in the EU are facing considerably fewer barriers to entry than in previous years. Croatia completed the legal harmonization process with the EU, and there are no unique legal barriers for the rubber and plastic industries in Croatia. U.S. firms should expect similar regulatory regimes to exist in Croatia as in other EU countries. Because the Croatian market is fairly sophisticated, businesses considering entry should plan well and consider:

- The price sensitive nature of consumer demand in Croatia;
- A judicious selection of one of the three low-risk entry strategies: representation, agency, or distributorship. (Note that a Croatian agent or distributor is preferable to a "European office" due to the difficulty of the language and other idiosyncratic market factors);
- The entrenched bias of a conservative market that sticks to known suppliers and therefore requires sustained market development.

CURRENT DEMAND

According to the Croatian Chamber of Commerce, the Croatian rubber industry and plastics industry are both heavily dependent on raw materials. Many of the larger Croatian firms process raw materials themselves, while some smaller firms are more likely to use semi-finished materials.

Due to the implementation of EU environmental regulations, demand for pollution control and green manufacturing equipment are on the rise. There has been increasing interest in sustainable technology and techniques as they relate to the rubber and plastics industries. Bio-plastics and tire recycling are rising in prominence within the Croatian market

The Croatian plastic industry is considered to be a very healthy and growing sector of Croatia's manufacturing sector but faced a dramatic decrease in production, which is attributable to the largest plastics manufacturing firm Dioki d.d halting production. Other smaller and especially medium- sized businesses are showing healthy growth and an increasing appetite for capital investments in production and new technology.

MAIN COMPETITORS

Domestic: There are 628 Croatian rubber and plastic manufacturers. Gumiipex, MuraPlast, Sipro, Alpa, Wachem, Bomark Pak, Vargon, Heplast-Pipe, Aquestil Plus and Alpro-Att are the 10 largest companies in the Croatian rubber and plastic industries.

International: German firms are, by far, the largest exporters of rubber and plastics to Croatia. Other major trade partners, such as Italy and Hungary, also import much of Croatia's rubber and plastic supplies.

MARKET ISSUES AND OBSTACLES

With Croatia's official EU accession on July 1, 2013, Croatia has been fully integrated into the European common market. So exporters who are familiar with EU regulations, such as CE-marking and REACH, will encounter similar regulations regarding exports to Croatia.

More information on REACH and CE-Marking can be found on the export.gov webpage <http://export.gov/europeanunion/eustandardsandcertification/index.asp>.

REACH, "Registration, Evaluation and Authorization and Restriction of Chemicals", is the system for controlling chemicals in the EU and it came into force in 2007 (Regulation 1907/2006). Virtually every industry sector, from automobiles to textiles, is affected by this policy. REACH requires chemicals produced or imported into the EU in volumes above 1 ton per year to be registered with a central database handled by the European Chemicals Agency (ECHA). U.S. companies without a presence in Europe cannot register directly and must have their chemicals registered through their importer or EU-based 'Only Representative of non-EU manufacturer'. A list of Only Representatives (ORs) can be found on the website of the U.S. Mission to the EU:

<http://export.gov/europeanunion/reachclp/index.asp>

Material Safety Data Sheets (MSDS) must be updated to be REACH compliant. For more information, see the guidance on the compilation of safety data sheets:

http://echa.europa.eu/documents/10162/17235/sds_en.pdf

U.S. exporters to the EU should carefully consider the REACH 'Candidate List' of Substances of Very High Concern (SVHCs) and the Authorization List. Companies seeking to export products containing substances on the Authorization List will require an authorization. The Candidate List can be found at: <http://echa.europa.eu/web/guest/candidate-list-table>.

The Authorization List is available at <http://echa.europa.eu/addressing-chemicals-of-concern/authorisation/recommendation-for-inclusion-in-the-authorisation-list/authorisation-list>

CROATIA

U.S. exporters unfamiliar with EU CE-Marking should consult the U.S. Commercial Service's EU Commercial Guide for more information. The EU Commercial Guide can be accessed free of charge at <http://export.gov/europeanunion/eustandardsandcertification/index.asp>

TRADE EVENTS

Name of Event: International Conference "Polymeric materials in packaging"
Date: November 2015, location to be determined
Location: Zagreb, Croatia
Website: <http://ambalaza.hr/en/conferences/announcements/polymeric/>

Name of Event: ModernPack
Date: May 23-26, 2015 Zagreb Fair
Location: Zagreb, Croatia
Website: <http://www.zv.hr/?id=11>

In Autumn 2015 (date to be determined), the Croatian Chamber of Commerce will organize a conference in association with the Slovenian Chamber of Economy, Plasttechnics Cluster Slovenia and EU association Plastics Europe. This will be the 10th conference in a row supporting the plastics and rubber industries in Croatia and neighboring countries.

AVAILABLE MARKET RESEARCH

Croatia Country Commercial Guide:
http://www.buyusainfo.net/docs/x_9017539.pdf
<http://export.gov/croatia/marketresearch/index.asp>

Croatian Chamber of Commerce – Plastics and Rubbery Catalogue
http://www.hgk.hr/wp-content/blogs.dir/1/files_mf/katalog_plastika_i_guma_2009.pdf

Institute of Packing and Graphing Art
<http://www.ambalaza.hr/en/>

ADDITIONAL CONTACT

Name: Gordana Pehnec Pavlović
Position: Executive Secretary
Email: gpehnec@hgk.hr, industrija@hgk.hr
Phone: +385 01 4606 765

CZECH REPUBLIC



U.S. Commercial Service Contact Information

CAPITAL Prague
POPULATION 10.5 million
GDP USD 196 billion (2012)
CURRENCY Czech Crown (1 US\$=20 CZK)
LANGUAGE Czech

NAME Hana Obrusnikova
POSITION Senior Commercial Specialist
EMAIL hana.obrusnikova@trade.gov
PHONE +420 257 022 436
CELL +420 602 419 130

SUMMARY

The Czech plastics and rubber industry accounted for 5.8 % of total industrial production, and generated revenues of \$3.2 billion in 2013. The industry employs 35,000 people. SME plastics producers dominate the sector and account for more than half of total revenue, employment and added value. Plastics consumption was 1.2 million tons in 2013, an increase from 1 million in 2012. These figures are comparable to those in Western Europe.

Massive investments into the automotive industry represent a major positive factor. The Czech Republic produces over 1 million cars annually and each car contains 100-200 kilograms of plastic products.

The packaging is the largest application sector with 39% followed by building and construction applications at 20%. Automotive industry represents 8%, electrical/electronic 6% and agriculture 4%. The rest is household products, appliances, furniture and medical products. Plastic packaging waste has the highest recycling (48%) and energy recovery rate (22%).

Plastics Material

Total production of primary plastic in 2013 amounted to 1,000,000 tons. The volume was due mainly to increased production of EPS (20%) which is widely used in the building industry (80%) and in packaging (20%). In 2013, EPS production grew to 62,000 tons (3rd in Europe). Czech producers export approximately 50% of their production, mainly to EU countries (75%). The majority of imports originate from EU countries, such as Germany (\$2.4 billion), Poland (\$0.5 billion) and Slovakia (\$0.3 billion). Slovakia has a special position because of its former joint economic ties within Czechoslovakia until the end of 1992. U.S. manufacturers of primary plastics maintain an import market share of 2% (\$30 million).

Plastics Machinery

Injection molding is the most widely used technology with a 59% share. Extrusion is the second most common technology with a 24% share and blow molding accounts for 5%. Local manufacturers of blow molding machinery are predominant with an 80% share of processing machinery. Domestic companies are also exclusive suppliers of injection molds. The biggest share of imported machinery comes from Germany and Italy. Some cheaper equipment is imported from Asia

MARKET ENTRY

The Czech Republic is geographically small, with 10 percent of the population and most decision-makers concentrated in the capital city of Prague. It is a market where good personal relationships are crucial, and everyone seems to know everyone else in a given industry. It is therefore recommended to find and support a Czech partner, agent, or distributor. An agent or distributor based in Prague can offer good coverage of the entire country. Though many will offer to represent your firm throughout Central Europe, we have found that a one-country, one-agent approach works best. In general, agents and distributors will expect exclusivity. Be careful to negotiate either a time limitation on the agent/distributor agreement, or a clause that allows termination for non-performance. Good support and management of the agent-distributor relationship is crucial. Many distributors are thinly capitalized or staffed, yet represent a wide variety of foreign companies. They often focus efforts on the hottest selling product of the moment, at the neglect of others.

CURRENT DEMAND

Additives, high-performance plastics, bioplastics, biodegradable plastics, nano-composites and wood-plastics-composites have good market potential. Demand for additives to improve traditional plastic performance is also high. The fact that energy awareness is becoming more and more important opens the door for U.S. companies offering insulation material for housing.

MAIN COMPETITORS

Local manufacturers of blow molding machinery are predominant with an 80% processing machinery share. Machinery for injection molding, extrusion and pressing are imported mainly from Germany. The U.S. share in plastics processing machinery is low, at approximately 2%.

The following brands are present in the market:

- German Krauss-Maffei, Berstorff, Hans Weber, Brabender, Technologie KG, Neue Herbold,
- Italian brands Bielloni Castello and Galileo Vacuum Systems
- French Sepro
- Swedish Rapid
- measuring equipment by Japanese Mitutoyo
- conveyors by German MTF.

MARKET ISSUES AND OBSTACLES

Plastic processing machinery and equipment must be labeled with the CE mark. The CE mark certifies that the product is in compliance with the European Union standards equivalent to Czech standards and can be used in the Czech Republic without further testing. Consulting the Czech Office for Technical Standardization, Measurement and Testing (<http://www.unmz.cz/office/en>) is recommended. Producers of primary plastics, additives, etc, should be aware of EU chemical regulation called REACH (Registration, Evaluation, and Authorization of Chemicals) http://guidance.echa.europa.eu/index_en.htm. REACH was implemented in June 2008, and it is a safety assessment system that any chemical introduced into the EU market is subject to.

Most U.S. equipment has a nominal duty rate of 2%, while equipment imported from EU countries enter duty-free. If imports from U.S. companies into the Czech Republic originate from production facilities in Europe, then the preferential rates for those countries are applicable. All products, regardless of origin, are subject to 20% VAT, which is actually paid by the end-user.

TRADE EVENTS

No event related to plastic industry will be held in the Czech Republic in 2015.



CAPITAL Cairo
POPULATION 86.9 million
GDP USD 271 billion (2013)
CURRENCY Egyptian Pound
LANGUAGE Arabic



U.S. Commercial Service Contact Information

NAME Rania Mekhail
POSITION Commercial Specialist
EMAIL Rania.Mekhail@trade.gov
PHONE +20 2797 3487

SUMMARY

The plastics industry is a well-established sector in the Egyptian market. The local manufacturers supply a wide range of sectors with plastics, including packaging for food, medical, and industrial goods. As of 2014, total investment in the local plastics industry amounted to \$8.7 billion with 3,000 factories employing a total work force of 52,500 people. It is estimated that at least \$160 million is invested in this industry annually. The Egyptian government wants to reduce plastic waste and is encouraging investment into recycling.

MARKET ENTRY

The plastics industry is well-supported by the government; this support is shown in the number of import and manufacturer registrations. This industry plays a great role in employment. The Egyptian Plastic Exporters and the Manufacturers Association are two private-sector associations that play a key role in advocating on behalf of manufacturers and assist in the development of the industry.

U.S. exporters are encouraged to engage a distributor or agent to represent them in the local market, to facilitate doing business and to deal with the Government of Egypt.

CURRENT DEMAND

The plastic and petrochemical industries have significant potential for expansion, as is reflected in the rapid growth of investments. During the last decade, Egypt witnessed an enormous growth in its plastic and petrochemical sectors in terms of advancing the technologies used by manufacturers. Many key players in the Egyptian market export their finished products to African countries (estimated to be 45%); to European markets (37%) and other markets (18%). These exports are key to the local economy and demonstrate that today Egypt stands as a key player, not only in the region, but also in the international arena. Egyptian manufacturers have invested heavily in purchasing high-technology machinery from Europe for use in a variety of production lines.

MAIN COMPETITORS

Machinery for the Egyptian market is imported predominately from China (approximately 37%), the European Union (35%) and other markets (8%). Local production accounts for 20%. Forty-five percent of necessary raw material is supplied by the local market. Egypt also imports raw plastics materials from Asia (40%), the European Union (10%) and other markets (5%).

MARKET ISSUES AND OBSTACLES

Following the January revolution, the entire Industrial sector was negatively affected due to political unrest. However, the plastics and petrochemical sectors were the least affected, as very few factories were closed down during this time.

FRANCE



CAPITAL Paris
POPULATION 66 million
GDP US\$ 2.735 trillion
CURRENCY EURO
LANGUAGE French



U.S. Commercial Service Contact Information

NAME Stephanie Pencole
POSITION Commercial Specialist
EMAIL Stephanie.Pencole@trade.gov
PHONE +33 (0)1 43 12 71 38

SUMMARY

France is a key player in the global plastics production industry, ranking 6th in the world based on turnover. Reaching nearly €29 billion in 2013, France represents 4% of the global plastics turnover. The French plastics industry is composed of 3,550 companies and a workforce of approximately 129,150 individuals. French companies in the plastic industry are considerably focused on export. The small size of the majority of French companies in this sector makes it essential for them to innovate and develop highly technical products.

Raw Materials:

France ranked 3rd in Europe (after Germany and Italy) and produced around 4.4 million tons of plastic materials in 2013 (thermosets, thermoplastics and technical thermoplastics). The "big six" plastic types that stand out in terms of their market share are:

- Polyethylene – including low density (PE-LD), linear low density (PE-LLD) and high density (PE-HD)
- Polypropylene (PP)
- Polyvinyl chloride (PVC)
- Solid Polystyrene (PS), Expandable (PS-E)
- Polyethylene terephthalate (PET)
- Technical Plastics and Composites

Together the first five plastic types account for around 75% of the overall plastics demand in Europe. The sixth type (technical plastics and composites), although of a lower demand in volume, plays a major role in industry. The auto industry is one of the main groups highly interested in these materials. This sixth class of plastics and composites includes: ABS (acrylonitrile butadiene styrene), polyamides, polycarbonates, polysulfones and polyamide-imides, polyurethanes, unsaturated polyesters, epoxides and polyimides.

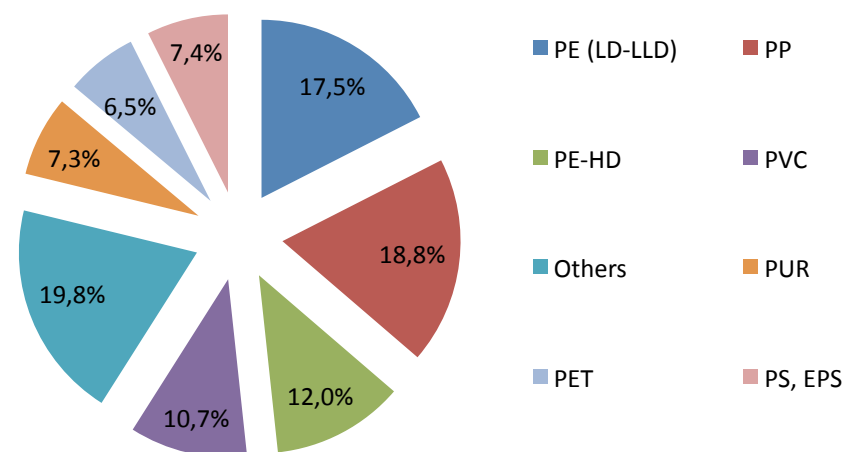
FRANCE

The biggest export markets for plastic raw materials outside of Europe are: China (incl. Hong Kong), Turkey, Russia and Switzerland. The United States ranks eighth as a trading partner with France after Germany, Belgium, Italy, Netherlands, Spain, China, and U.K., with sales of USD 264 million of raw materials (see table n.1).

USA exports of Plastic Raw Materials to France in 2013

		US\$ Million
3911	Petro Resins, Polysulfide	37
3902	Polymers of Propylene	77
3907	Polyether, Epoxides, Polyesters	33
3904	Polymers of Vinyl Chloride	37
3910	Silicones	17
3906	Acrylic Polymers	21
3908	Polyamides	7
3901	Polymers of Ethylene	6
3909	Amino Resins & Polyurethanes	9
3905	Polymers of Vinyl Acetate	6
3903/3912/3913/3914	Others	14

(Table 1:Source: Common Data Platform/ITA information)



(Source: Plastiques 2012 - Faits et chiffres)

Plastics Processing:

The turnover in the local plastics processing industry reached €28.5 billion in 2013 (down 1.6% from 2012). Sales of processed plastics products are broken down as follows:

- Technical parts: 29%
- Packaging: 26%
- Building products: 18%
- Semi-finished products: 17%
- Others: 10%.

As with its European counterparts, France's industrial plastics processing companies continue to face a high volatility of raw materials prices (ranging from -20% to +20%) in the past 2 years. This constant variation in raw materials prices leads to a volatility in total manufacturing costs of -5% to +5%.

In 2013, exports reached €7.4 billion, an increase of 3.1% compared to 2012's figures. The European Union (mainly Germany, Italy, Belgium, Spain, and the U.K.) is France's main trading partner, accounting for 73% of exports. 45% of imports come from Germany and Italy. Imports reached €10.7 billion in 2012, an increase of approximately 1.9% compared with 2011.

Outside of the EU, France's main clients are: Switzerland, the U.S., Turkey, Tunisia and China. France's main suppliers outside of the EU are China (41%), USA (12%) and Switzerland (7%). The United States sold €330 million in plastic products to France in 2012, an increase of approximately 7.5% compared with 2011. The same year, French exports to the U.S. reached €241 million (see table n.2).

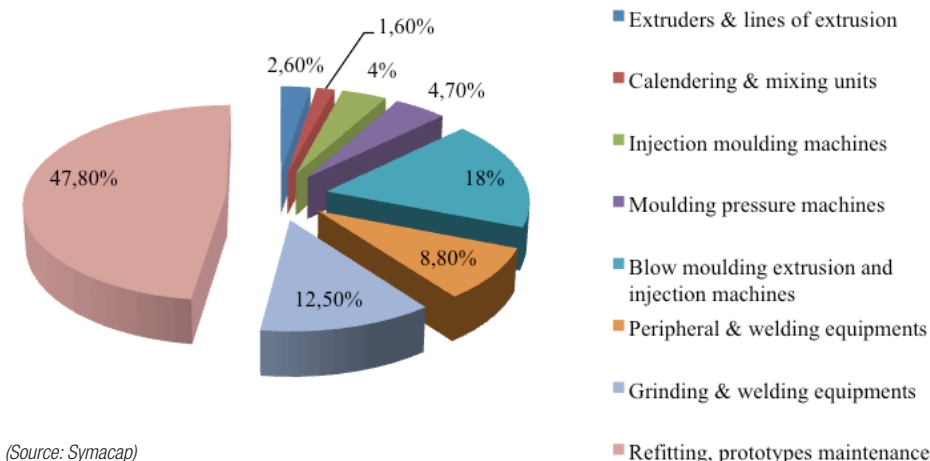
2011 Figures	Exports million €	Imports million €
Technical Parts	2,400	3,600
Semi-Products	2,400	4,100
Packaging	1,800	2,100
Construction	600	1,000
Total	7,200	10,800

(Table 2:Source:Panorama de la Plasturgie 2014)

Plastics Machinery:

France is one of the top-four plastics machinery and equipment producing countries in Europe after Germany, Italy and Austria, with a production share of 10% out of €12.3 billion. The French plastics machinery and equipment industry generated a turnover of around €1.4 billion in 2012, distributed as follows:

Domestic Production 2013:



(Source: Symacap)

The French market for plastic and rubber equipment reached €605 million in 2013. France is third in Europe in terms of plastic and rubber equipment consumption, after Germany and Italy.

French manufacturers of plastics machinery and equipment sell the majority of their production within the European Union. Outside Europe, France's main two clients are China and the United States. Exports represented about 90% of the global 2012 production to reach € 875 million. The majority of machinery and equipment exported are blow molding machines (46%), followed by mixing machines (26%), pressing machines (12%), injection machines (10%) and extrusion machines (6%).

Imports of plastic machinery mainly originate from Europe. The United States is the 6th largest supplier of machinery and equipment to France after Germany, Italy, Switzerland, Austria and China. The U.S. sold € 15.2 million worth of machinery and molds in 2013, mainly HS 847790 (€ 9.0 million), HS 847780 (€ 3.4 million), HS 847720 (€ 1.5 million) and HS 847759 (€ 1.2 million).

MARKET ENTRY

Distribution:

The French plastic market is highly orientated towards technical and other specialty products such as: performance plastics, reinforced plastics and self-reinforced plastics, wood-plastics composites, other natural fiber composites, innovative composites, bio-plastics (conductive and biodegradable) and nano-materials.

B2B marketplaces, direct purchase and marketing via wholesalers, distributors or agents are the main distribution channels in France for plastic materials and equipment. For plastics machinery, a partner with repair capabilities and spare parts availability is necessary. Price is an important factor in most transactions, as are quality and supplier reliability.

In order to sell innovative and specialty plastic products, direct communication between supplier and processor is often necessary to ensure product quality satisfaction. Unlike innovative specialty plastics, B2B marketplaces are often used to purchase standard plastics. These types of standard material orders are usually placed with long-term suppliers.

Plastics machinery and materials are primarily marketed through local distributors. The demand for imports from outside the EU is limited due to the fact that the majority of plastics manufacturers in France are small companies employing fewer than 20 people and only 2% of French plastics manufacturers are large companies with more than 250 employees. Being small companies, the majority of plastics manufacturers in France generally import in small quantities acquired more easily locally (in Europe) than abroad.

French companies generally prefer long-term business partners, and business-partner decisions are conscientiously taken. French-language product literature is a necessity in communicating with the majority of French plastics companies.

Customs:

Trade barriers, such as quotas, do not exist. A standard value-added tax (VAT) of 20 percent is applicable to all goods.

Customs Classification Codes:

Plastic Machinery and Equipment:

8465 – For items relating to machine tools the duty is 2.7%

8477 – For items relating to injection molding machinery, extrusion machinery, and thermoforming machinery the duty is 1.7%

Resins: 3901 through 3915 – For these resins (polymers, polyamides, resins) the duty is 6.5%

Products: 3916 through 3926 – Duties vary between 5.3% and 6.5%

Molds: 848071 and 848079 – The duty is 1.7%

MARKET ISSUES AND OBSTACLES

Machinery:

All plastics machinery and equipment coming from non-European countries must be tested and approved by the European Committee, which ensures that every product brought into Europe meets the European Union's health, safety and environmental requirements to ensure consumer safety throughout Europe (Directive "Machines" 2006/42/CE). The CE Mark certifies that the product is in compliance with EU standards. Usually, plastics machinery from the United States is marketed in France via distributors. French processors expect their machinery supplier to be local for after-sales services purposes. Manufacturers, representatives or importers of any machinery or equipment brought into Europe by non-European countries must fill out an "EC-Declaration of Conformity" or an "EC-Declaration of Incorporation" document stating that the product has complied with all necessary standards.

Materials:

- REACH affects all supply chains in the EU that produce, import and use chemicals. It is volume-oriented, affecting substances in volume of or exceeding one ton.
- (http://echa.europa.eu/home_en.asp). The U.S. Commercial Service EU REACH website contains information on the latest REACH developments, and it posts regularly information on REACH workshops and webinars organized by the U.S. Government: <http://export.gov/europeanunion/reachclp/index.asp>.
- European BioPlastics Association members have made a voluntary commitment to certify and label their products according to EU Standard EN 13432 / EN 14995 when advertising, using the descriptions: "compostable" or "biodegradable". The Association supports the establishment of national certifying bodies, together with unified labeling of compostable bioplastics products in Europe. It is lobbying for the establishment of a European regulation regarding the treatment of these products under waste legislation. A 2006 French regulation requires all disposable retail carry bags to be biodegradable by 2010. (loi d'orientation agricole n° 2006-11 du 5 janvier 2006).

TRADE EVENTS

Name of Event: K Show

Date: October 19-26, 2016

Location: Dusseldorf, Germany

Website: <http://www.k-online.de/>

Description: Overview of the entire plastic industry: raw materials, molds, machinery, tools.

FRANCE

Name of Event: Europack – Euromanut
Date: November 17-19, 2015
Location: Eurexpo Lyon, France
Website: <http://www.europackonline.com/>
Description: Plastic materials and machinery for packaging applications

Name of Event: FIP Solution Plastique
Date: June 2017
Location: Eurexpo Lyon, France
Website: <http://www.f-i-p.com/>
Description: Overview of the entire plastic industry: raw materials, molds, machinery, tools.

AVAILABLE MARKET RESEARCH

France: Bioplastics Market Report 2011
France: Best Prospect Plastics 2014
France: Overview of the Plastic Products Industry 2012
France: Overview of the Composites Market 2013

USEFUL CONTACT INFORMATION

French Plastics Federation:
<http://www.federation-plasturgie.fr>

Plastics Europe
<http://www.plasticseurope.org>

Plastics Converters
<http://www.plasticsconverters.eu>

Plastics Recycling
<http://www.plasticsrecycling.org>

Symacap
<http://www.symacap.org>

Euromap
<http://www.euromap-ess.org>

GERMANY



U.S. Commercial Service Contact Information

CAPITAL Berlin
POPULATION 80.5 Million
GDP US\$ 3.3 Trillion
CURRENCY EUR
LANGUAGE German

NAME Kirsten Hentschel
POSITION Commercial Specialist
EMAIL Kirsten.Hentschel@trade.gov
PHONE +49-211-737-767-30

SUMMARY

Germany is the largest consumer market in the heart of the European Union, with a population of over 80 million. Germany has the highest GDP of all EU member states. One of its federal states alone, North Rhine-Westphalia, has a higher GDP than Switzerland. It hosts the European Union's highest concentration of technology and science institutions. The significance of the German marketplace goes well beyond its borders. International companies appreciate its central location within the EU, favoring shipments into other European countries. Not surprisingly, an enormous volume of worldwide trade is conducted in Germany at some of the world's largest trade events. For example, K' Show, the world's largest plastics show, attracts international visitors from over 100 countries. These are but a few of the many reasons why U.S. firms make Germany the cornerstone of their European-expansion strategies.

Germany is home to Europe's largest plastics market. It offers good potential for innovative U.S. plastics materials and equipment. Approximately 2,849 firms are active in the German plastics industry, achieving annual sales of EUR 57.6 billion in 2013 (+3% over the previous year). The local plastics industry consists of three main pillars: processing; machinery and materials.

Plastics Processing:

The majority of the German plastics companies is focused on plastics processing. Forty-four percent of all processed materials were polyolefins. In 2013, local industry processed plastics in value of EUR 57.6 billion. Main sectors supplied were consumer goods, packaging, automotive and construction. Over 50% of the products for the German construction segment were made of PVC.

Plastics Processing Industry according to Segments	Annual Sales in EUR/USD billion 2010-2012				
	2011	2012	Change	2013	Change
Plastics Processing total:	55.9	55.9	0%	57.6	+3.0%
Sub-Segments below					
Packaging	13.3	13.2	-1.0%	13.6	+3.5%
Construction	11.3	11.4	+1.2%	11.7	+2.1
Automotive/Electro-Engineering	13.3	13.3	+0.2%	13.8	+3.7%
Other, incl household, consumer goods, medical, sports & leisure	18.0	18.0	0.0%	18.5	+2.7%

Source: GKV (Association of the German Processing Industry) 2014

Plastics Machinery:

The plastics-machinery segment is the second largest sub-sector of the German plastics industry. Over 200 local companies achieve annual sales of approximately EUR 6.5 billion. After China, Germany is the world's second largest producer of plastics and rubber machinery. A number of global players, such as Arburg, Wittmann/Battenfeld, Dr. Boy, Engel, Kreyenborg, Kiefel, Krauss-Maffei, Leistritz and others are based in Germany or in neighboring countries. As a direct consequence, foreign manufacturers of standard plastics machinery trying to enter the German market face very strong competition. Market opportunities for complete machinery from the United States are generally very limited. Molds usually face strong competition in Germany because of local production, but also because shipping large molds from overseas can be very costly.

In general, U.S. products have a good reputation and are known for their high quality. Rather than standard machinery, spare parts and innovative peripherals from the United States have good prospects, e.g., measurement or testing devices.

In June 2014, SPI (The Plastics Industry Association) and EUROMAP (European Plastics and Rubber Machinery Association) signed a declaration of intent on free trade for plastics machinery to strengthen their competitive position in the global marketplace. Today, the United States and Europe produce 50% of the global plastics machinery market, achieving annual sales totaling EUR 15 billion or USD 18.2 billion.

With regard to U.S. contract manufacturers of plastics products, U.S. companies should be aware that they will need to compete with local, well-established service companies that, unlike U.S. manufacturers, neither face customs nor shipping cost, and can respond to emergency requests or production changes on short notice.

With an anticipated annual growth rate of 6.3% through 2016, the outlook for the German plastics machinery market is fairly positive.

Plastics Materials:

The third pillar of the German plastics industry is the raw materials sector. With approximately 230 companies, it is the smallest sub-sector by number of companies but generates four times the annual sales achieved by the German plastics-machinery producers. While there are several large chemicals and plastics producers headquartered in Germany (BASF, Bayer, Lanxess, Wacker and others), there still is a strong demand in Germany for new materials, innovative additives and other substance-improving material features.

In 2013, German firms produced 19.8 million tons of plastic raw materials and achieved annual sales of EUR 26.7 billion/ USD 32.5 billion. The following industries are major consumers of plastics materials in Germany: packaging (35%); construction (23.5%); automotive (10%); electro/electronics (6%); furniture (3.9%); agriculture (3.1%); consumer goods (2.9%); medical (2.3%) and others 13.3%.

In 2013, German imports of plastics materials increased by 1.8%, amounting to 8.5 million tons. Traditionally, the largest share of German plastics imports originates from the European Union - in 2012 it amounted to 87%. From September 2013 to September 2014, German plastics imports from the United States increased by 5.4% to EUR 0.5 billion. While innovative niche market products are produced locally or are imported from countries like the United States, standard plastics materials or commodity plastics are supplied by Asia, particularly from China, Malaysia and South Korea.

U.S. companies have the best market opportunities if they offer innovative materials or substances to enhance plastics or the processing of plastics. The average annual growth rate for traditional plastics materials is estimated at approximately 2% over 2015-2016. Innovative plastics are in strong demand – growth rates for innovations are much higher and can reach 5-10%.

German processors are constantly trying to improve their products. There also is a strong interest in energy-saving production solutions. In addition, the automotive and aerospace industries are highly interested in new, lightweight materials that can help save fuel costs, while the general consumer is looking for products made of bio-plastics that help improve the environment. Bio-based polymers, in general, are increasingly gaining importance, particularly bio-PET. It helps that today, additives, fillers and reinforcing substances for bio-plastics are readily available - demand for them is still growing.

Over the next few years, U.S. manufacturers offering plastics materials from shale gas exploration, usually less costly than those made from fossil resources, may find additional market opportunities in Germany and other European countries due to their competitive pricing.

MARKET ISSUES AND OBSTACLES

Distribution:

Direct purchase, B2B marketplaces and marketing via wholesalers or distributors are the major channels of distribution in the German plastics industry.

- Sales of highly innovative plastics materials often require direct communication between supplier and processor to ensure satisfactory product results. Unlike specialty innovative plastics in small amounts, standard plastics are often purchased via B2B marketplaces. B2B orders are usually placed with long-term suppliers for standard materials.
- Plastics machinery or materials are marketed primarily through local distributors. Distributors vary in size. Large German distributors often operate in various EU countries or partner with local firms. U.S. firms often use one well-established German distributor or wholesaler that distributes their products in Germany as well as in other European markets.
- German companies usually prefer long-term business relationships. In an industry, where production standstill can cost a fortune, fast response time is essential. In addition to pricing, quality and supplier reliability are major buying factors. German-language product literature is appreciated.

Customs:

Trade barriers, such as quotas, do not exist. The German import duty for injection molding machinery, blow molding machinery and extruders is 1.7%. The average customs duty for plastics raw materials is 6.5%. In addition to import duties, a 19 percent import-turnover tax (Einfuhrumsatzsteuer) must be paid at the EU border point of entry, which is then passed on to the ultimate end-user in the form of the value-added tax (VAT or Mehrwertsteuer, MWSt).

Compliance with local and European regulations:

Machinery: U.S. firms exporting to Germany need to comply with local and European regulations such as the CE mark required for machinery. The CE mark (including conformity statement and technical documentation of the country of import) is required for:

- components regulated by the EMV Directive 2004/108/EG (electro-magnetic compatibility);
- machinery covered by the machinery safety regulation 2006/42/EG;
- equipment covered under the EU Low Voltage Directive 2006/95/EG.

Materials:

- REACH (Registration, Evaluation and Authorization of Chemicals).
- CLP-Regulation (Classification, Labeling and Packaging of Substances and Mixtures)

Information on the above is available from: <http://echa.europa.eu/web/guest/regulations>.

Certification of bio-plastics: The European Bioplastics Association is fostering the use of bio-plastics throughout Europe and also develops the appropriate standards. Certification is on a voluntary basis. Further details are available from:

<http://en.european-bioplastics.org/standards/certification/>

TRADE EVENTS

U.S. companies participating at a German trade show may find it advantageous to reach out to local companies of interest prior to the show and invite German companies to their booth.

Name of Event: K' Show

Date: October 19-26, 2016

Location: Duesseldorf

Website: <http://www.k-online.de>

Description: K', the world's prime trade event for plastics and rubber materials and machinery, offers exhibition opportunities for the whole range of the plastics industry, including plastics and rubber machinery, raw materials and auxiliaries as well as semi-finished products and services. The show takes place every three years. In 2013, it hosted 3,200 German and international exhibitors and attracted 218.000 visitors from 140 countries. The 113 U.S. firms in two U.S. pavilions were very satisfied with the results of their participation. The U.S. Commercial Service provides extensive support and enhancements to U.S. exhibitors and U.S. visitors.

Name of Event: FAKUMA

Date: October 13-17, 2015

Location: Friedrichshafen

Website: <http://www.fakuma-messe.de/en/fakuma/>

Description: The annual Fakuma show (does not take place during K' Show years) offers a wide range of products from injection molding to extrusion, including machinery and systems, peripheral equipment, raw materials, additives, tools and molds, automation and quality control. In 2014, some 1,772 exhibitors from 36 countries participated in the event, attracting 45,689 visitors from 117 countries. Thirty-one percent of the visitors came from outside of Germany. Compared to the highly international K' Show, FAKUMA mainly focuses on Germany and southern Europe but has grown in importance over the past few years.

GERMANY

Name of Event: European Coatings Show

Date: April 21-23, 2015, April 2017

Location: Nuremberg

Website: <http://www.european-coatings-show.com/en/>

Description: The biennial European Coatings Show (ECS) is Europe's major trade event for the coatings and paint industries, as well as for adhesives, sealants and construction chemicals. In 2013, 25,845 trade visitors attended the event, which showcased 962 international exhibitors from 43 countries. The U.S. Commercial Service plans to support the U.S. exhibitors in this show, as in the past, with targeted emails to German distributors and buyers, company information on the CS Germany website and individual phone consultations and on-request market and company research.

Medical plastics products are displayed at medical manufacturing trade shows such as the annual Compamed in Dusseldorf, which is co-located with the annual MEDICA trade show in November of each year:

<http://www.compamed-tradefair.com/>, or at Medtec Europe, Stuttgart:

http://www.canontradeshows.com/expo/medtec10/index_en.html

AVAILABLE MARKET RESEARCH

Germany: Country Commercial Guide 2014

HUNGARY



CAPITAL Budapest

POPULATION 9.9 million

GDP \$ 187.6 billion

CURRENCY Hungarian Forint

LANGUAGE Hungarian



U.S. Commercial Service Contact Information

NAME Csilla Virágos

POSITION Commercial Assistant

EMAIL csilla.viragos@trade.gov

PHONE +36-1-475-4250

SUMMARY

In Hungary the production volume in the plastic industry increased by 1.1 percent at comparable prices against 2013. The capability of the sector to assert prices is good. Export opportunities are positive and expanding. The plastics industry accounts for six percent of Hungary's total industrial production. With regard to the manufacture of plastic products, the dominance of large enterprises is apparent, accounting for over 70 percent in Hungary. Traditionally, plastic raw materials manufacture has been the strongest sub-sector of the Hungarian chemical industry, and global investors have strengthened this position in the last years. Average plastic consumption per capita in Hungary is relatively high: it is 71 kilograms annually. This figure can be compared to the average of Western European countries where it is 100 kilograms annually or to Eastern European countries where it is only 23 kilograms annually. The big average in Central European region is 55 kilograms annually. Domestic production structure does not match the demand, for instance Hungary cannot produce paste PVC or technical plastics. The demand for plastic and plastic products is mostly a derivative one: the industry's prospects are closely tied to general economic trends, industrial investment, and the consumption of the population. The downturn in the key customer sectors of plastics — such as construction, automotive, machinery and equipment — is consequently impacting the plastics industry.

MARKET DATA

After the economic downturn, the sector indeed became the fastest developing sector of the chemical industry. The volume of foreign sales from the plastics processing industry grew by 13.5 percent and domestic sales rose by 11.9 percent. The growth rate in exports of rubber industry products was 29 percent, while domestic sales rose by more than 18 percent. The key foreign trade partners for the chemicals and chemical products sub-sector, in order of importance, are Germany (17.4 percent), Russia (8.6 percent), Poland (8.3 percent), France (7.6 percent) and Italy (7.1 percent).

The production of plastic raw materials is traditionally the strongest branch of the Hungarian chemical industry. The manufactured volume has been steadily growing for decades and the export of plastic raw materials is a fundamental pillar of the Hungarian plastics industry: over 78 percent of production is exported. Ignoring a few smaller dips, the growth of the Hungarian plastics industry was unbroken for two decades. Plastics processing has shown steady growth since early 2011, with foil manufacturing and die-casting accounting for the biggest volumes. Foil is mainly used for packaging in the construction industry, and in agriculture. The biggest customer for die-cast products is the automotive industry, followed by consumer goods (household, sports ware, toys, furniture, etc).

There are some small companies specializing in innovative composite technology development. The composites produced are used for sanitary goods, vehicles, sports goods and in other specific areas. Boats, buses, and ultra-light small recreational airplanes are also manufactured in Hungary.

Local process equipment production is insignificant. Some machine parts and die-cast equipment are manufactured by small Hungarian companies. The market is dominated by German manufacturers: About 80 percent of the machines come from Germany, and the rest of the market is largely made up of Italian and increasingly Taiwanese machinery.

BEST PROSPECTS

Although there is significant local production, the structure and portfolio of domestic production differs largely from domestic demand. The ratio of import in processing is around 70 percent. PE and PP make up the biggest volume in imports. Certain materials like paste PVC, engineering plastics or composite raw materials are not produced locally at all.

Hungary imports all sorts of plastic products. Packaging material and foil represent the highest volume but this is largely due to the import of packaged goods.

KEY SUPPLIERS

There are approximately 460 plastics processing companies in Hungary, including one-person operations. Out of these, 300 can be considered significant, processing over 25 tons raw material a year. Although 17 major companies account for 45.9 percent of total plastics processing, and a total of just 71 companies handle nearly 80 percent of plastics processing, there are still some SMEs present.

Some of the most significant plastics processing companies are: Tiszai Chemical Works (TVK), LEGO Hungary, BorsodChem, Ongropack, Everplast, Masterplast, Graboplast, Jasz-Plasztik, Novoplast, PEVA, Qualchem, Trade-Chem.

MARKET ISSUES AND OBSTACLES

The Hungarian market is open for foreign products and services. With Hungary's accession to the European Union on May 1, 2004, Hungary adopted the EU's common external tariff (CXT) rates, resulting in an average tariff level of 3 percent for plastic products. Tariff assessment and all other customs procedures take place at the first port of entry into the EU. The Value Added Tax (consumption tax) is one of the highest in Europe as it is 27 percent on most products and services.

RESOURCES

Association of the Hungarian Plastics Industry:

<http://www.huplast.hu>

<http://www.muanyagipariszemle.hu>



CAPITAL New Delhi
POPULATION 1.2 Billion
GDP USD 1.85 t (US – 15.09t)
CURRENCY Rupees
LANGUAGE English / Hindi



U.S. Commercial Service Contact Information

NAME Shantanu Sarkar/Nisha Wadhawan
POSITION Commercial Assistant
EMAIL Shantanu.Sarkar@trade.gov
 Nisha.wadhawan@trade.gov
PHONE +91-990 304 4658
 +91-98 118 29368

SUMMARY

India's plastics market has the potential to grow faster than that of any other nation in south Asia. Industry projections forecast a ten percent increase, which is 1.2 to 1.5 times the growth in GDP. Based on the current market rate of US\$ 1: INR 61, it is estimated to be as high as US\$ 33 billion. Per capita consumption of plastics in India is projected to grow to 20 kilograms by 2020, up from a current figure of 8 kilograms. The per capita plastic consumption is 13 times less than that of the United States (95 kilograms), nine times less than that of Europe (65 kilograms) and nearly four times less than the world average of 26 kilograms. The tremendous rate of consumption of plastics in almost every aspect of consumers' daily lives underscores the critical importance of this industry to the economic growth of the country.

During 2012-13, the amount of polymer supplied was about 1,158 million tons. India has an estimated 50,000 plastic processing facilities with a processing capacity of over 30 million tons per annum. More than 50 percent of these are small and micro facilities. The estimated number of plastic processing machines currently installed is approximately 115,000. According to one industry estimate, the growth of India's plastic processing capacity over the last 5 years was 13 percent.

Despite the large number of plastic processing facilities, India's polymers industry is oligopolistic and dominated by four large producers. Major polymers produced in India are polyethylene, polypropylene and polyvinyl chloride. Current polymer production capacity is mostly underutilized, with operating efficiencies varying from 66 percent to 86 percent. However, despite the shortfall in production, imports of a variety of polymers are still not as high as anticipated. This is reportedly due to a slowdown in investment in the sector.

There are about 250 domestic plastic-machinery manufacturing suppliers. The domestic downstream industry includes injection molding (IM), blow molding (BM), roto molding (RM) and extrusion. Modified

and specialized processing equipment is also available. These suppliers serve clients working in a wide array of applications, such as, packaging, automobile, consumer durables and non-durable, healthcare, agriculture, infrastructure and electronics.

The greatest potential exists for commodity plastics including polyethylene (PE), polypropylene (PP), polyvinylchloride (PVC) and polystyrene. Polyethylene (PE) includes HDPE, LLDPE and LDPE and has the largest share of about 43% of total plastic raw material consumption in India and is growing at about 8%. Some explanations for this are current low per-capita consumption, end-use industry growth, increasing urbanization and changing lifestyles that are creating a greater demand for use of plastics in a variety of products and packaging. Engineering and specialty plastics are used for specific purposes and exhibit superior mechanical and thermal properties in a wide range of conditions over and above the properties of more commonly-used commodity plastics. These include styrene derivatives (PS/EPS), polycarbonate, polymethyl methacrylate, polycarbonates, etc.

The Government of India (GOI) plan to invest US \$1 trillion on infrastructure during the 12th Five Year Plan: It is expected to have a significant positive impact on the demand for specialty construction chemicals. Another emerging segment for plastics applications is in agriculture. Plastics which are most widely used in agriculture, water management and related applications are PE, (LLDPE, LDPE and HDPE), PP and PVC. The long-term concerns about the polluting qualities of plastics must be weighed against the many positive uses in managing water resources. Accordingly, there are opportunities for investment by local companies in the development of more effective ways to recycle plastic wastes.

SUB-SECTOR BEST PROSPECTS

The following four sub-sectors offer huge investment potential for U.S. plastic companies.

1. Construction chemicals-specialty polymers
2. PET Strap; Plates/Sheets/Film/Foil/Strip; and Resins (thermoplastic) & Additives
3. Medical Plastics
4. Plasticulture

The Indian construction-chemical market is highly competitive, and with the increase in global construction companies entering into manufacturing in India, the industry is experiencing strong growth. In 2012, concrete admixtures accounted for 42 percent of the total construction-chemical market, while flooring and waterproofing chemicals each had a 14 percent share. Other segments include sealants, grouts and adhesives which together account for 18 percent of the total construction-chemicals market. The share of flooring is high in India compared to more developed countries. At the same time, India has a low share of tiling, sealants and waterproofing. Companies with innovative, low-cost products with wider applications are likely to capture a significant share of the market.

Marketing chemicals for waterproofing, concrete additives or anti-leak agents could be a potential strategy to enter this subsector.

Of note, many projects funded by multilateral agencies like the Asian Development Bank (ADB) and World Bank have mandated the use of good quality construction chemicals. Current and pending regulatory guidelines incentivizing developers to build energy-efficient and green buildings will also drive the demand for suitable, innovative protective coatings and safe chemicals.

1. PET Strap; Plates/Sheets/Film/Foil/Strip; and Resins (thermoplastic) & Additives

In India, the demand for use of PET recycled products has resulted in unconventional use of PET, because other plastics and glass are less cost-effective and unable to match the desired quality. PET's crystal-clear transparency and glossy opaqueness have resulted in added value for India's manufacture of consumer products. In the first half of FY 14, India imported nearly half the amount of PET it acquired in 2012-13 and U.S. companies can tap this potential market to export PET strap to India.

Commodity plastics are plastics that are used in high volume and wide range of applications. The packaging industry uses the largest percentage of commodity plastics (37 percent), followed by 21 percent for the building and construction sector. The automotive sector uses eight percent and electrical and electronics manufacturers use about six percent. In addition, the medical, leisure and other sectors together account for approximately eight percent. The best prospects are for American suppliers to the packaging industry and building and construction industries.

India offers a huge market to suppliers of thermoplastic specialty resins, additives and compounds used in paints, printing and textile-coatings industries

Medical Plastics

Plastics have been used in medicine for over four decades. The medical-device sector is one of the most promising markets in India. Demand for new plastics-manufacturing equipment and technology, especially in the injection molding sector, is likely to grow by at least ten percent a year for the next five years or more. Technical developments in plastic processing, equipment manufacturing and engineering have also increased the use of plastics in the health care sector.

Due to the increasing awareness in health and hygiene and concern about the spread of drug-resistant contagious diseases, the central government is determined to provide basic healthcare in rural areas. India's emergence as a medical-tourism market is also expanding the need for plastics in medical products. Commodity plastics such as PVC, PE, PP, PS account for 85 percent of all medical plastics. India currently consumes 19,000 metric tons of plastics for use in the medical sector. This amount is expected to grow at a 16 percent a year in the near term. The demand for direct and contract-manufacturing of plastic products and components is increasing. Besides local industrial

growth, some leading foreign companies are also slowly entering the Indian market to manufacture plastic products. Flexibility of design and manufacturing, cost advantages and easy maintenance of plastic components will continue to support the growth of plastic goods for the next several years. U.S. firms are encouraged to work closely with qualified organizations, and/or to maintain licensing/joint venture agreements with Indian firms

Plasticulture

Plasticulture, which involves the use of plastics in agriculture and horticulture, among other areas, is growing in popularity across India. There are projections for greater use of this technology in India. For example, micro-irrigation can reduce water requirement by up to 70 percent and will benefit farmers tremendously. For this reason, in 2005, the Indian government launched the Micro-Irrigation Scheme (MIS). As of 2010, the MIS was being used on 1.79 million hectares of land at an approximate cost of US\$450 million. In addition, India's 22 Precision Farming Development Centers (PFDCs) are successfully encouraging the adoption of modern agricultural techniques involving plastics and promoting plasticulture and its uses.

Correspondingly, the growing awareness of the benefits of plasticulture will drive the demand for polymers over the next five years. Polymer demand in India increased by 13 percent in 2012 and, according to a major industry study, the major growth drivers by percentage were packaging (15), plasticulture (14), plastics in Infrastructure (13) and plastics in consumer durables (10).

Local manufacturers and some foreign companies are eyeing the growing potential of India's plasticulture market. Plasticulture applications in India are broadly classified in the following categories: water management (drip and sprinkler irrigation); greenhouse application such as nursery management, surface-cover cultivation and controlled-environment agriculture; lining of water bodies and innovative packaging.

OPPORTUNITIES

Overall, India is unable to produce the volume and variety of plastic materials, such as Polyethylene (PE), Polyvinyl Chloride (PVC) and engineering plastics. These are needed to meet the rising demand by domestic and foreign companies with manufacturing operations throughout the country. As a result, most materials must be imported. India's existing plastic-processing capacities offer a significant potential for upgrade through introduction of innovative technologies. Currently, about 50 major suppliers from China, Taiwan, the U.S., Japan and European nations account for 40 percent of all machinery imports. Purchases of manufacturing equipment and supplies could reach US\$10 billion by 2020. However, a steep rise in raw material costs resulting from an increase in crude oil prices may affect future profit margins in the industry, and the potential for large acquisitions would likely be impacted.

According to a leading industry chamber, India now has a critical need for high production and automatic blow molding machines, multilayer blow molding, stretch blow molding machines, specific projects involving high capex like PVC calendaring, multi-layer film plants for barrier films, and multi-layer cast lines, BOPP and nonwoven. Also required are multi-layer blown film lines (up to 9/11 layers), automatic block bottom bags production lines, higher tonnage injection molding machines >2,000T and higher tonnage >500T and all electric injection molding machines.

India's plastic recycling effort is impressive. Although it is one of the leading countries in plastic recycling, India needs newer technology to recycle PET bottles, automotive parts, e-waste; and plastic waste to fuel, energy recovery route from plastic waste (incineration), and use of PE & PP waste for road construction. The estimated investment in local plant and machinery for the recycling industry is about US\$ 27 million.

TRADE EVENTS

Name of Event: PlastIndia 2015, PlastIndia 2018 (dates to be determined)
Date: February 5 – 10, 2015
Location: Gandhinagar, Gujarat
Website: <http://www.plastindiafoundation.org/index.php>
Description: PlastIndia 2015 will offer a global platform for buyers and sellers from the plastic industry to enhance their business prospects, establish strategic alliances, technology transfer etc. Showcasing a platform of international standards, PlastIndia 2015 will pave the way for intra-industry cooperation and will ensure bridging the gap between the international community and Indian enterprises while exploring bigger business avenues.

Name of Event: Indplas 2015
Date: Nov 27-30, 2015
Location: Kolkata, West Bengal
Website: <http://indplas.in/UI/Pages/Overviews.aspx>
Description: The Indian Plastics Federation (IPF), established in 1958, is regarded as the torchbearer of the plastic industry in India. The Federation is dedicated to the development and growth of the plastic industry and is active in upholding the interest of the industry for over five decades. IPF has successfully organized the sixth edition of Indplas in October 2012 as INDPLAS'12. IPF will organize Indplas'15 as the seventh International Exhibition on Plastics from 27-30 November 2015 at the Science City Ground, Kolkata.

Name of Event: Plastasia 2016
Date: March 4-6, 2016
Location: New Delhi
Website: <http://www.plastasia.in/>
Description: Plastasia 2016 is the fifth edition of the Plastasia show. This show is being held every two years. The 2013 show was organized in Bangalore (now officially known as Bengaluru) and displayed the entire range of the plastic-processing machinery, accessories, raw materials, additives, masterbatches, intermediates, range of quality control and testing equipment, machinery for foams and welding machines, IT applications and ancillary equipment, among others.

WEB RESOURCES

Ministry of Chemicals and Fertilizers
<http://chemicals.nic.in/>

Planning Commission
<http://planningcommission.nic.in/>

Chemicals & Petrochemicals Manufacturers Association of India
<http://cpmaindia.com/>

PlastIndia Foundation
<http://www.plastindia.org>

All India Plastic Manufacturing Association
<http://www.aipma.net/>

Federation of Indian Chamber of Commerce and Industries (FICCI)
www.ficci.com



CAPITAL Jerusalem
POPULATION 8.5 million
GDP US\$ 305 billion
CURRENCY New Israeli Shekel
LANGUAGE Hebrew and Arabic



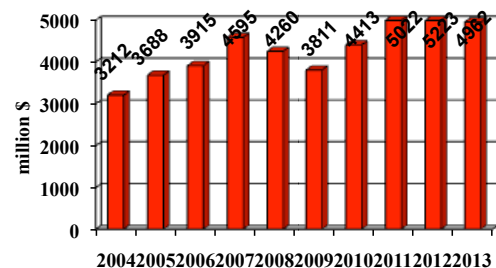
U.S. Commercial Service Contact Information

NAME (Mrs.) Yael Torres
POSITION Commercial Specialist
EMAIL yael.torres@trade.gov
PHONE +972-3-519-8522

SUMMARY

The Israeli \$4.9 billion plastic and rubber industry is characterized by innovation, marketplace adaptability, a strong R&D tradition and resourceful manufacturing. It is focused on specialty, custom-made applications, high-quality, quick-delivery, large and small batch productions. The industry benefits from strong scientific ties with universities and research institutes.

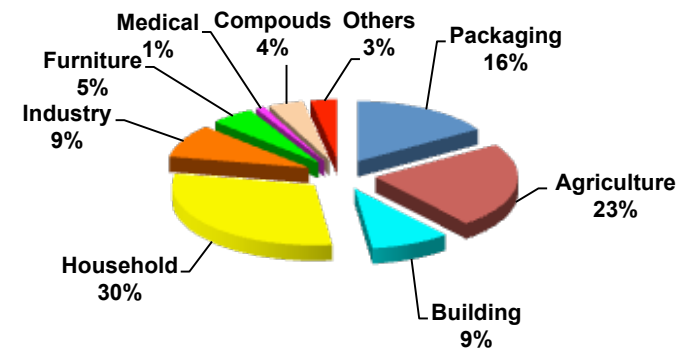
Israel's Plastic & Rubber Industry Turnover (Million \$)



Source: Society of Israel Plastic & Rubber Industry

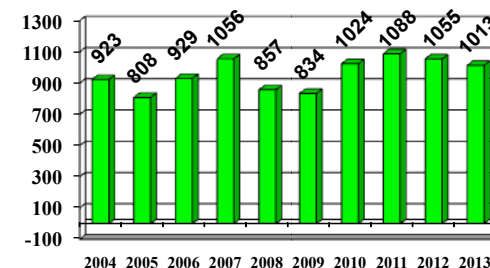
It constantly applies research into new applications and seeks R&D partnerships with research and commercial entities. The market had a turnover of \$4.9 billion in 2013. This export-driven industry includes manufacturers of packaging solutions, advanced products for agriculture and construction industries, raw materials and additives, DIY and consumer goods, industrial parts, automotive parts, medical devices and disposables, and plastic components for the aviation and aerospace industries. The majority of Israeli plastic manufacturers use injection and extrusion technologies.

Sales Breakdown

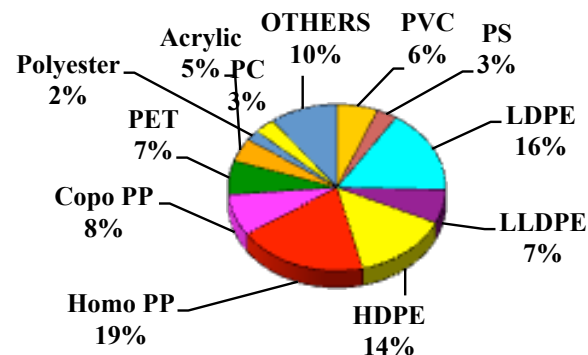


Raw material consumption in the industry exceeds one million tons annually. Most of the raw material used by the industry is being imported, accounting for over \$500 million annually. Machinery imports reached \$126 million in 2011. Industry growth has been 30% over the last ten years. Israel's plastic industry's turnover in 2013 exceeded \$4.9 billion-a 5% compared to 2012.

Israel's Plastic & Rubber Industry Raw Material Consumption (thousand tons)

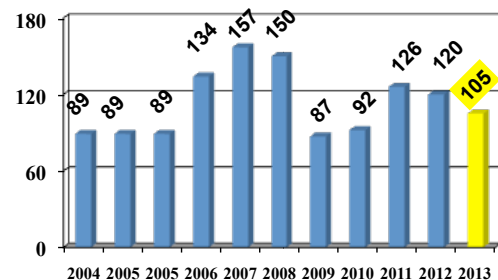


Material Consumption Breakdown



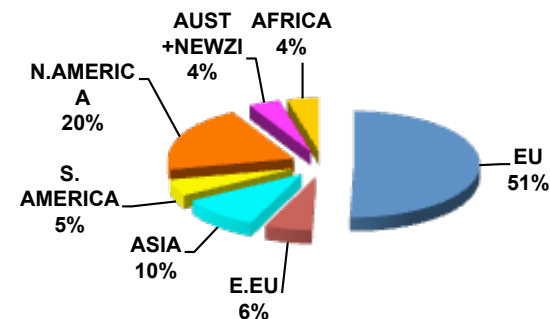
Source: Society of Israel Plastic & Rubber Industry

Machinery Import (million \$)



Raw materials and specialty compounds such as polyethylene, polypropylene, polystyrene and PVC are produced in Israel on a large scale. The wide variety of grades is produced for local consumption as well as for export. In addition, compound manufacturers work hand in hand with product manufacturers to develop specialty compounds, custom-made for new applications. Exports of plastic raw materials and parts from Israel exceeded \$2.4 billion in 2013.

Export Destinations 2013



MARKET ENTRY

Partnering with a local representative who has good industry contacts, proven reliability, loyalty, technical skills and after-sales service capabilities is important for selling and maintaining a continued presence in Israel. U.S. companies need to be aggressive in their pursuit of business opportunities and maintain an active in-country presence. The Israeli industry generally prefers to purchase goods through a local agent who will be able to provide after-sales service. Government and government-owned buyers will often require an agent in Israel. The majority of agents have exclusive representation rights because of Israel's small size. Most U.S. heavy industrial equipment exporters to Israel use a commission agent who conducts promotional campaigns and active buyer calls. Distribution methods vary by type of product. For industrial equipment, raw materials and commodities, manufacturers use non-stocking commissioned agents, while stocking agents represent high-volume items. Direct purchase through agents is the most common Israeli distribution channel for raw materials and machinery. Israeli agents represent most major multinational producers.

CURRENT DEMAND

The Israeli plastic industry continues to present market opportunities for U.S. manufacturers of raw materials, masterbatches, "smart" composites, as well as machinery and equipment for the plastic industry. The industry relies on a flawless supply of raw materials and dependable machinery and equipment. Interested suppliers can contact Yael Torres, Commercial Specialist, at:

yael.torres@trade.gov

ISRAEL

MAIN COMPETITORS:

Israel is a mature market in many sectors and U.S. companies will face significant local and international competition.

MARKET ISSUES AND OBSTACLES:

Becoming a major player in the Israel plastic & rubber industry requires an investment in marketing, logistics and R&D. Suppliers are also required to comply with international standards and regulations and should be ready to submit products for relevant testing and market approvals.

TRADE EVENTS

Name of Event: Plasto Ispack 2016
Date: 21-23 June 2016
Location: Tel Aviv Trade Fairs and Convention Center
Website: <http://www.fairs.co.il/plasto>
Description: A triennial exhibition, offering an opportunity to get acquainted with the latest developments in Israel's high-tech plastics, rubber and packaging industries and to develop business contacts, both local and international.

AVAILABLE MARKET RESEARCH

The Society of Israel Plastics & Rubber Industries
<http://www.plastic.org.il/>

Israel Plastic & Rubber Center
<http://www.isplrc.co.il/>

Kibbutz Industries Association
<http://www.kia.co.il/eng/>

JORDAN



U.S. Commercial Service Contact Information

CAPITAL Amman
POPULATION 6.5 million
GDP US\$ 31 billion
CURRENCY Jordanian Dinar(JOD)
LANGUAGE Arabic (official), English

NAME Fareedon Hartoga
POSITION Senior Commercial Specialist
EMAIL fareedon.hartoga@trade.gov
PHONE +962 6 590 6053

SUMMARY

Jordan is located in the heart of the Levant area, which makes it an excellent hub for doing business in the region. Despite the instability surrounding Jordan, its economy was able to adjust and the GDP grew 3.2% in 2013.

The U.S.-Jordan bilateral trade reached US\$ 3.2 billion in 2013. One of the main reasons is the Free Trade Agreement (FTA) that was signed between Jordan and the U.S. in 2001, which entered into full implementation beginning in 2011.

The plastic sector in Jordan is considered one of the major industries, which manufactures several products that are used both internally and exported, viz:

1. Plastic pipes
2. Household plastic products
3. Agricultural plastic products

MARKET DATA

Plastic production in Jordan experienced a gradual but progressive recovery during 2013 and the first half of 2014 despite levels of production 28% lower than those before the crisis. This has influenced a significant rebound in construction, which had fallen to levels below 50% from the beginning of the crisis.

The Jordanian plastic industry parallels industry in general and also had a positive development during 2013 and the first half of 2014, with levels around 22% below the start of the crisis. This occurred in the production and processing of raw materials.

Compared to 2012, plastic consumption in 2013 remained stable. Standard plastic consumption grew by 4.5% at the expense of maintaining production and increased imports.

Consumption of plastic materials in Jordan is focused in the following areas: Packaging (46%), construction (12%), automotive (9%), electricity (6%), and others (27%). In recent years, the use of plastic materials in the agricultural sector has increased in importance.

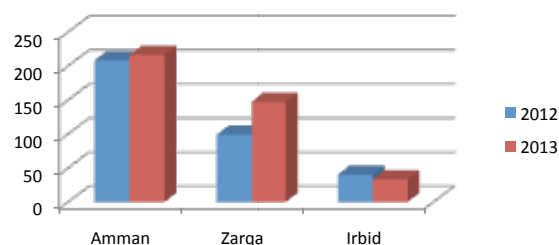
MARKET ENTRY

U.S. companies interested in entering the Jordanian market have three options:

1. Have a direct investment (owned 100%) by establishing a manufacturing facility in Jordan to serve the local market and the region. The Jordan investment law and the Investment Commission provide support and incentives for foreign companies interested in investing in Jordan.
2. Entering into joint ventures with Jordanian companies. There are several local companies that have the expertise and knowledge to be good partners, either to build new manufacturing facilities or to buy shares in existing ones.
3. Find local distributors, who can cover the regional market as well.

CURRENT DEMAND

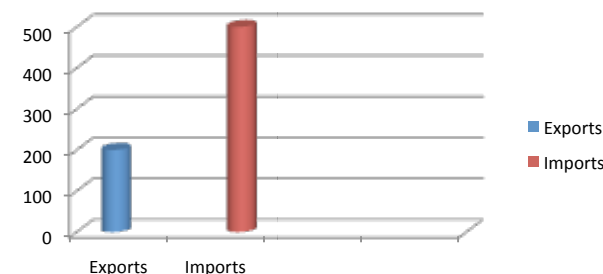
In Jordan, the plastic industry is located in three main cities: Amman, Zarqa and Irbid. In 2013, the total number of companies working in the plastic industry reached 396, compared to 325 in 2012, increasing by 22%, and distributed as follows:



The increase in the number of companies in the plastic market in Jordan reflected the availability of working capital, which rose from \$77 million in 2012 to around \$100 million in 2013, an increase of 30%. At the same time, labor in the plastic industry grew by 18% from 5,062 employees in 2012 to 5,935 in 2013.

Year	Capital US\$ Million	Labor
2012	77	5,062
2013	100	5,935

The Jordanian plastic market size in 2013 was about \$700 million, where plastic products exported from Jordan reached \$200 million, while the imports of raw materials and plastic products were around \$500 million.



Plastic pipes and household plastic products leads Jordan's exports followed by agricultural plastic products. Jordan's main export markets are Iraq, Saudi Arabia, Israel, the U.S. and Mexico. Jordan imports raw materials for its industry mostly from the Gulf countries, such as Saudi Arabia and the U.A.E. Moreover, Jordan imports finished plastic products mostly from the Arabian Gulf and China. The construction sector is the major consumer for plastic products in Jordan with 55%, followed by pharmaceutical and cement industries with 6% each. In terms of machinery in 2013, Jordan imported different kinds of plastic equipment such as molding, injectors, blowing and forming worth more than US\$15 million.

MAIN COMPETITORS:

Jordanian imports in the plastic industry are comprised of three segments:

1. Raw materials
2. Finished products
3. Machinery

Regarding raw materials, Jordan's main supplies come from Saudi Arabia and the U.A.E., while for finished products, local production competes with imports from the Gulf and China. As with machinery, Asian and European-made equipment dominates the market

MARKET ISSUES AND OBSTACLES:

The plastic-industry market in Jordan faces several issues, viz:

- Prohibitions on the import of recycled raw materials
- Limited and improperly trained workforce
- Increased competition among locally manufactured products
- High cost of energy
- Plastic products imported by Jordan must meet Jordan Standards and Metrology specifications.



U.S. Commercial Service Contact Information

CAPITAL Astana
POPULATION 16.8 million
GDP \$ 12,007 with 6.5% growth rate
CURRENCY Tenge
LANGUAGE Kazakh, Russian

NAME Aliya Shaikhina
POSITION Commercial Specialist
EMAIL Aliya.Shaikhina@trade.gov
PHONE +7 (727) 250 7612 ext. 6491

SUMMARY

Kazakhstan is one of the top oil and gas producers internationally. Its GDP's growth has been driven largely by its oil and gas and mining industries experiencing continued stable global demand saw 4.4% growth in the first half of 2013 and is projected to grow 5% in 2014. Chemicals, plastics and rubber exports from Kazakhstan are currently at 4.1 % of the overall foreign trade volume, with imports accounting for 10.7% of overall foreign trade volume.

Kazakhstan is endowed with considerable hydrocarbon reserves. However, until recently, oil refining and petro-chemistry were relatively ignored, with most projects revolving around upstream exploration and production. Realizing the immense potential that lies in refining, petro-chemistry and other value-added activities, the Government has proposed major development plans to boost its chemical industry. Kazakhstan plans to invest more than \$9 billion in the industry in the period from 2012 to 2015. These funds will be invested in different projects under the Chemical Industry Development Plan for 2011-2019.

The current low worldwide price for oil around \$60 a barrel as of December 2014, may delay the Government of Kazakhstan's ambitious plans to develop the chemical industry. According to the latest IMF report released November 2014 Kazakhstan's budget is more insulated from the import of low prices than other regional oil exporting countries.

The structure of the chemical industry in Kazakhstan, excluding oil, gas and coal chemistry, includes 10 chemical sub-sectors producing: mineral fertilizers (phosphorous, nitrogen, complex); inorganic chemistry products (salts, acids, alkalis, gases); lacquers and paints; explosives; plant protection products; organic chemical products; consumer chemicals, including household chemicals, perfumes

and cosmetics; filter materials, individual and collective means of protection; other chemical products; processing of industrial waste. Kazakh enterprises produce chemical fibers and threads, chrome compounds, calcium carbide, synthetic detergents and soap, mineral fertilizers, coarse microbiological protein, plastics and technical resin composites. The country also produces plastic packaging, plastic bottles and flasks, foam plastic packing, polystyrene, synthetic resins and plastics. Chemical plants also produce chrome oxide, phosphorus, chlorine, monohydrate serum acid, and sodium tri-phosphate.

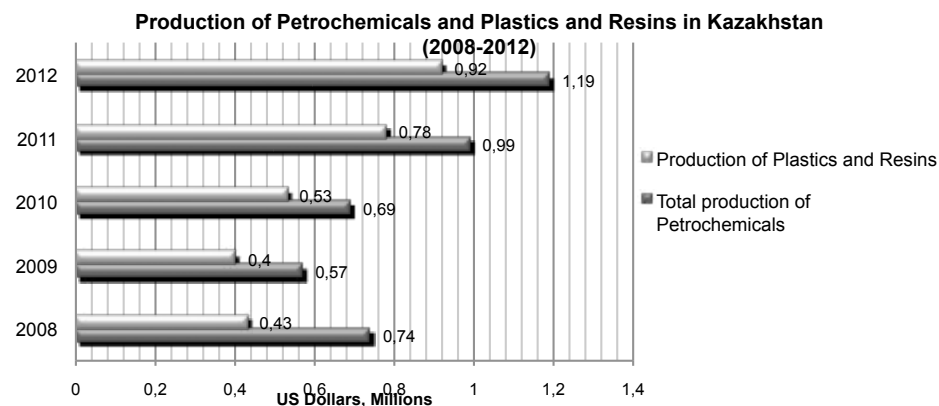
Chemicals and plastics represent only about 4% of industrial output and around 1.2% of the country's GDP with potential for significant increases in the future. Despite this, Kazakhstan already is a significant provider of polystyrene (PS), procured from facilities near the city of Aktau on the Caspian coast. Natural gas from new Kazakh fields will be processed into ethylene and propylene, allowing the country to eventually become a significant producer of polyethylene (PE) and polypropylene (PP).

Kazakhstan's plastics and rubber industry is underdeveloped, with local companies seeking raw materials, supplies and equipment and machinery to fill in the missing chemicals and reagents from abroad. Small and medium enterprises and production facilities in Kazakhstan have strong demand for quality packaging materials, recycling equipment and machinery, extrusion equipment, polymerization materials and polypropylene etc. Around 85% of all local enterprises are small, 7-10% - medium and 2-3% are larger companies with about 900 companies involved in the industrial production of chemicals. There are around 1,200 local companies involved in plastics and rubber production. The total number of companies within the chemical petrochemical sector is around 4,000.

The plastics market is currently experiencing active development: imports are growing; production is developing; new distribution companies are appearing and different foreign petrochemical companies are entering the Kazakhstani market. Dow Chemical and Dupont are among the U.S. chemical companies that have entered the market within the past 3 or 4 years.

The structure of market demand for plastics is as follows: containers and packages – 30-40%; goods for industrial production – 15-18%; plastic foil – 16-17%; profile-molded goods – 5-18%; domestic plastic goods – 10-14%; plastic pipes – 4-9%; plastic tiles – 2-3%.

The largest consumers of plastic products are the following sectors: construction – 26%; the producers of packaging materials for food industry – 25%; households – 10%. On average, the plastics sector is expected to grow at 6-10% rate annually.



Source: Damu Fund Research 2013

The plastics industry is stable and has shown substantial growth during recent years. There was an increase in local production of plastic and rubber products by 35.6% between 2010 and 2012. This is associated with the recovery of the real estate market and the development of the construction sector as a part of the Accelerated Industrial Innovative Development program in Kazakhstan. Experts note that the producers, processors and distributors of plastics and related equipment survived the global financial crisis with minimal losses.

The plastic processing industry in Kazakhstan can be divided by several types: production materials, domestic products and profile-molded products, plastic foil, pipes and packages. The main raw materials used for the production of mentioned products are polyolefin, polyvinyl chloride and copolymers of vinyl chloride.

Plastic products imports are 21-26% of total imports. This high volume indicates that local producers are unable to compete with foreign importers in terms of quality and pricing, particularly with plastic tile, polymeric products for industrial purposes and profile-molded products.

Trends in the packaging market

The current packaging market capacity in Kazakhstan is about \$250 million

Kazakhstani enterprises switch from raw paper materials to polymeric materials

Currently, Kazakhstani enterprises focus on production of more upscale packaging.

According to the Association of packaging producers, packaging manufacturers work with foreign equipment and raw materials producers; only glass manufacturers use local materials. Local production of packaging paper and cardboard is the most developed in the country as Kazakh producers hold about 60% of the market in this segment. The most significant sector forcing the packaging market to develop is the food industry. In recent years, intense demand for packaged food products, due to rising income and the increasing availability of goods, is driving the move from weighed to packed, grocery and consumable products.

Manufacturers of packaging materials made of paper import raw materials from Russia, Finland and Kyrgyzstan. The main suppliers of raw materials for polymeric packaging are Finland, Germany, Poland, Russia, Turkey and Uzbekistan among others.

Currently there are 5,000 companies that are involved in food production. The main problem they have faced is the lack of packaging materials. The main packaging imports are provided by the Russian Federation. Kazakhstani producers can provide only 40% of the demand for packaging materials. 25% of all the demand for packaging materials is covered by Russia and the rest is covered by Chinese producers and Central Asian countries. Kazakhstani companies do not have a chance to produce packaging materials due to the fact that the customs tariffs are very high for importing the raw materials such as polyethylene and polypropylene. The first polyethylene and polypropylene producing factory is projected for 2016 in Atyrau city.

From 2011 to 2013 the imports of plastic products from China in dollar amount increased from \$14.4 million to \$29.9 million. The demand for plastic products is obviously high and will be growing every year. The Chinese packages are more popular because the price for the product is 40% lower than the market price in Kazakhstan.

Trends in polymer pipe production

The polymer pipe production sees a significant growth due to the fact that Kazakhstan decreased the imports of polymer pipes from Russia and Turkey. The total market demand for polymer pipes is 222.7 tones which by 37% is covered by local producers. The development of this sector is justified by governmental and regional programs on renovation and of water supply networks and canalization and building new networks around Kazakhstan.

The production of polyethylene pipes is also growing. During the period of time from 2010 until 2014 when the State Program of Forced Industrial-Innovative Development started its operations around Kazakhstan many new polyethylene pipe manufacturing companies were launched. They are: Aktybstroykhimmontaj LLP, "Taraz Pipe Factory" LLP, SoNIK LLP, Uralsk Trade and Manufacturing Company LLP and others.

However, despite the new pipe manufacturing companies were launched the main market players have kept their positions:

STZ Arystan LLP	20,000 tones/year
Atyrau Polyethylene Pipe Factory LLP	17,000 tones/year
Kazakhstan Pipe factory	10,000 tones/year
Plast Invest Trade LLP	8,000 tones/year

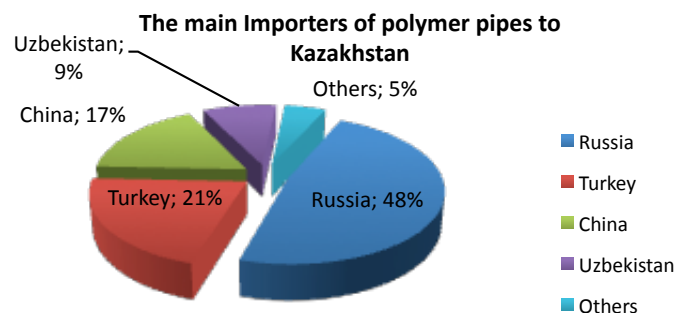
In 2016, the first polyethylene and polypropylene production facility in Kazakhstan – Atyrau Gas Chemical Complex – will be put into operation. Kazakhstan plans to satisfy the local market demand which mostly remains dependent on imports and initiate export of these raw materials. The majority of pipe-manufacturing factories are equipped with Chinese machines. There are exceptions found in

factories like Atyrau Polyethylene Pipe Factory LLP, Kazakhstan Pipe factory and Industrial Construction Company KARO. These factories are currently using machines from Cincinnati Extrusion (Austria) and KWH (Finland).

Kazakhstan is a net-importer of polymer, which is the main raw material for pipe production. Up to 80% of the price of a pipe produced and sold in Kazakhstan is due to the cost of polymer. The polyethylene that is used in pipe production is mainly PE [1] 100 and PE 80 [2], imported from South Korea and PE 80, imported from Russia. Atyrau Polyethylene Pipe Factory LLP uses PE 100, imported from European countries, for its production. Some enterprises import a low-quality polyethylene from Uzbekistan produced at Shurgan Natural Gas Chemical Complex and some producers increase their profits at the expense of pipe quality."

[1] PE 100 - Designations of PE 100 are based on the long-term strength of the respective materials, known as the minimum required strength (MRS) which is 10.0 (in accordance with ISO 12162).

[2] PE 80 - Designations of PE 80 are based on the long-term strength of the respective materials, known as the minimum required strength (MRS) which is 8.0 (in accordance with ISO 12162).



Source: Damu Fund Research 2013

MARKET ENTRY

All products, regardless of origin, are subject to a 12% VAT which is to be paid by the end-user. It also has to be added on top of all customs duties and excise taxes upon entry into Kazakhstan. The raw materials for producing plastics and packaging can be imported at the customs rate of 10%. The competitive advantage of a new player entering the plastics market can only be the low price of the products.

Establishing a local presence or selecting a local partner, agent or distributor for effective marketing and sales distribution in Kazakhstan is recommended. Kazakhstan has a small population spread over a large area, and distribution channels should be able to represent U.S. firms' needs countrywide.

Prior to appointing a distributor, due diligence is a must. A local distributor typically needs to be capable of handling customs clearance, dealing with established wholesalers/retailers, marketing the product directly to major corporations or the government, and handling after-sales service, if required.

Kazakhstan has major international oil companies as partners, which can provide financial support and technology for petrochemical sector development. Although state ownership and control remains at a very high level, privatization and/or joint ventures provide a good basis for capacity expansion and upgrades within the sector.

American companies interested in identifying business partners in Kazakhstan can use various fee-based services offered by the U.S. Commercial Service office in Kazakhstan. For more information, visit <http://export.gov/kazakhstan/servicesforu.s.companies/index.asp>.

CURRENT DEMAND

Market demand for plastics is greatest in Almaty, Astana and Eastern Kazakhstan. The market of constructional plastic materials is almost fully supplied by foreign raw materials and technologies. According to industry experts, the biggest demand is for plastic pipes, windows and fittings. Plastic tile use is less common. Russian and Chinese products used in Kazakhstan are of low quality and leave a niche for high quality products from the U.S. & other market exporters.

The growth of the construction sector, which is approximately 10% per annum, caused a significant rise in demand for profile-molded goods and other plastic products. The Kazakhstani market of profile-molded goods strongly depends on imported raw materials, though the local producers try to manufacture substitutes for imported products. Local production has the potential to rise in the future. Investment in this sector is derived by the residential reconstruction program.

To support the industry, the government secured reduced railroad tariffs for chemical and petrochemical products. It encourages foreign investments in the industry, as there is a lot of untapped potential, especially in the petrochemical industry, as large volumes of oil and gas are exported abroad in a crude or unprocessed form. In general, many chemical and petrochemical enterprises face financial difficulties and need additional investments and up-to-date technologies.

The main objective of Government support in the industry is the enhancement of existing capacities through the introduction of state-of-the-art technologies, better utilization of raw materials, and introduction of new production lines to generate added value in the country and to reduce import dependence on processed plastics, resins and chemical products. The outcomes of such investment are not expected until 2015-2019.

Domestic companies generally use raw hydrocarbons to produce polymer resins. However, just two of the five companies in the industry are operational in Kazakhstan. The Aktau plastics' plant has capacities of 100,000 tons per annum (tpa) of ethylene and 220,000tpa of polystyrene (PS). A small polypropylene (PP) plant with capacity of 30,000tpa is operated by Polypropylene Guryev in Atyrau.

Product	Company	Location	Capacity (tpa)	Completion date
Ethylene	KPI	Kazakhstan	850,000	2016
Propylene	KPI	Kazakhstan	450,000	2015
Paraxylene	Atyrau Refinery	Kazakhstan	496,000	2014
Benzene	KPI	Kazakhstan	133,000	2014
Polyethylene (PE)	KPI	Kazakhstan	800,000	2016
Polypropylene (PP)	KPI	Kazakhstan	400,000	2015

Source: BMI research

The Government of Kazakhstan will be looking for international companies to partner in these projects. Some new investment projects, which are currently under consideration or in development include: Construction of a methanol producing plant. Methanol will be produced from dry gas supplied from the Western Kazakhstan gas fields. The plant, which is planned to be built near Zhanaozen in Mangistau region, is estimated at \$3 billion.

Petrochemical production complex. Plant construction is estimated at \$2 billion, and the site will be either on the Atyrau chemical plant territory or near Karabatan (Eskene) in Atyrau region.

Diversification of the Aktau plastics producing plant. The purpose is to restart PS production. The cost of the project is estimated at \$500 million.

Kazakhstan plans to use revenues generated from its oil and gas exports to stimulate local industry development. The strength of regional economic growth, driven by hydrocarbons, should accelerate demand for petrochemical products. According to Business Monitor International (BMI), under the optimistic demand forecast for PE and PP in Kazakhstan by 2015, per capita consumption is expected to exceed the world average, and by 2020, the figures could reach the level of developed countries. Average PE consumption per capita worldwide is 8-10kg, and PP consumption is about 5kg. The most developed countries – the US, Japan and Western European countries – consume about 20-40kg and 15-20kg per capita, respectively.

Suppliers of the following chemicals might find an interest in entering Kazakhstan's market:

- Chemicals, catalysts, working materials (the components which comprise an integral part of the cycle for the production of a finished product either as raw materials or additives or elements for the chemical/physical reaction).
- Raw materials derived from petroleum;
- Polymerization additives;
- Formulation additives;
- Finishing additives;
- Work process additives;
- Gaseous products;
- Heat exchange fluids;
- Reaction catalysts.

There is untapped potential for the manufacturing of various petrochemical synthesis products, in particular, ethylene, polypropylene, and resin.

Plastics equipment and machinery that has potential demand in Kazakhstan includes:

- Equipment for plastic and rubber production and processing
- Machines and equipment for processing
- Machinery and equipment for preprocessing and recycling
- Extruders and extrusion machines
- Extrusion lines
- Casting facilities
- Presses
- Blow molding machines
- Injection molding machines
- Thermoform machines and tools
- Equipment for foam plastic and reactive layer processing
- Equipment for further treatment
- Welding equipment
- Press molds and dies
- Auxiliary equipment, components, forms, matrices
- Test and monitoring instrumentation and automation instruments
- Raw and ancillary materials (catalysts, stabilizers, fillers, foaming agents, pigments) for plastic production
- Plastic and rubber products (semi-processed goods, finished articles, including those from secondary materials)
- Ancillary machines and facilities for plastic waste
- Plastic recycling systems

The Government plans to allocate significant funding for current production upgrades and the development of new plants. The level of asset depreciation in chemical production is very high, and there is a lack of qualified service providers (equipment production, project design, technical maintenance, etc.). Taking these factors into account, upgrading existing industry infrastructure will mostly be conducted by engaging international chemical industry equipment producers and engineering companies.

MARKET ISSUES AND OBSTACLES

Current key issues in the industry include:

- low degree of raw materials processing;
- non-conformance of production with international standards;
- depreciation of fixed assets, with more than 80% of existing fixed assets being obsolete;
- low ratio of fixed asset renewal;
- absence/limitation of plant capacity to produce a variety of products
- and an insufficiently qualified labor force.

Kazakhstan does not have chemical engineering companies that are fully-equipped to provide the whole range of services to conduct effective chemical production design: analytical research, pre-design and design expertise, equipment design, supply of technology, construction control, and technical support.

Over the past decade, Kazakhstan has made progress in transforming its domestic economy to create a more transparent, less regulated and more market-driven business environment. However, today Kazakhstan's trade may be more restricted due to recent developments than before.

As of January 2010, the Customs Union (CU) between Belarus, Kazakhstan, and Russia became effective. It has led to an increase of the majority of existing tariffs in order to match the ones in Russia. So the CU countries now face similar limitations on certain categories of goods. More than 5,000 tariffs have been raised to match those of Russia (among them foodstuffs and equipment). The average customs rate for plastics products has increased from 10.1% to 14.1%, while the tariff for machinery and equipment was raised to 3% from previous 0.5%. The existing list of restricted chemical imports might also change to match that of Russia and Belarus.

U.S. firms should be aware that the metric system is widely used in Kazakhstan, also for plastic equipment and machinery. Kazakhstani buyers sometimes choose European producers due to existing differences between North American and European standards.

With regard to pricing, the following should be part of price calculation: Transportation costs, duties associated with import (customs duties and fees, certification payments, etc.), VAT, and high profit margins which are traditionally expected by local importers/distributors (businesses in Kazakhstan tend to charge much higher margins than in other countries).

The greatest challenge is that customs regulations tend to change often. Procedures, lists of goods that are subject to mandatory licensing, and other technical issues are under constant revision, and customs officials frequently use regulations selectively and arbitrarily.

U.S. companies should be aware that there is strong competition from Russian, Chinese, Southeast Asian, and European producers. Consumers in Kazakhstan are very sensitive to pricing and quality of goods; nevertheless, most consumers are willing to pay premiums for uniqueness or higher quality. Higher-than-average prices, however, have to be justified by a recognizable brand name, marketing or special features.

TRADE EVENTS

Name of Event: 11th Kazakhstan International Chemical Industry Exhibition and the 5th International specialized exhibition "Raw Materials, Equipment, Plastic and Rubber Production and Processing Technologies"

Date: November 2015 – TBC

Location: Atakent International Exhibition Center

Website: <http://www.chemie.kz/ru/plastex>

Description: The Chemie and Plastex Central Asia exhibitions feature suppliers of chemical raw materials and manufacturers of equipment for plastics production. The organizers hold the construction expo projects and chemicals and plastics exhibitions in one venue, presenting the audience with the entire manufacturing chain: raw materials - equipment - end product.

Name of Event: Expo Central Asia Plast

Date: November 2015 – TBC

Location: Atakent International Exhibition Center

Website: www.expocentralasia.com

Description: Central Asia Plast is a smaller scale event specializing on plastics industry. It is held alongside Central Asia Machinery, Tube and Pipe and Secure Expo.

AVAILABLE MARKET RESEARCH

Kazakhstan: Chemical and Petrochemical Industry Overview 2014



U.S. Commercial Service Contact Information

CAPITAL Distrito Federal
POPULATION 114.9 million
GDP \$ 1.8 trillion USD (2013)
CURRENCY Pesos
LANGUAGE Spanish

NAME Mario Vidana
POSITION Senior Commercial Specialist
EMAIL Mario.Vidana@trade.gov
PHONE +52 818 047 3118

SUMMARY

Mexico has a significant shortage of plastic resins. About 50% of the demand from the Mexican manufacturing sector is met by imports. A total of 2.6 billion tons of plastic resins were imported in 2013, in keeping with the ascending trend since 2008.

Two petrochemical plants located along the Mexican coast in Coatzacoalcas and Altamira are the main Mexican producers of resin (i.e. polypropylene, PVC, PET, and polystyrene) for plastic manufacturing, though their output is insufficient to cover the national gross demand of 2.8 million tons. The Mexican plastics industry relies on its commercial partners, including the U.S., Canada and Asian countries, to fulfill raw material needs. According to the National Association of the Plastic Industry (ANIPAC), Mexico's national production and imports of resins have contributed to the country's supply of two percent of world plastic production, amounting to 5.3 million tons with a market value of nearly \$23 billion. The same ANIPAC statistics reveal that Mexico has over 3,500 plastics companies. Of this number, 60% are micro-companies, 36% are small and medium size, and only four percent are large companies.

The current administration has assisted in increasing Mexico's production by allowing energy reforms that will come to contribute to reduce manufacturing costs. In addition, the country has opened long-closed doors to investments in refining, gas processing and manufacturing basic petrochemicals. As a result, Mexico is constructing the first major private-sector petrochemical project in 20 years. Etileno (Ethylene) XXI is a \$3.2 billion greenfield petrochemical complex being built in Nanchital near Coatzacoalcas, Veracruz. The project consists of a one million tons per year ethylene cracker, two high-density polyethylene (HDPE) plants, one low-density polyethylene (LDPE) plant and storage, waste-treatment and utility facilities, including a multimodal logistics platform for shipment of one million tons per year of polyethylene via bulk train or truck.

ANIPAC forecasts a total 2014 market growth of 6% and of 15% by 2020, at an annual rate of 3.8%. Mexico's production capacity is also expected to grow to 11 million tons by 2019, with major trade partners being the United States and Canada.

Another important trend is seen in the plastic-recycling industry. A little over four million tons of plastic waste is generated in Mexico every year, but only one third of that gets recycled. An estimated investment of \$1 billion, experts believe, is necessary to integrate the newest recycling technology.

MARKET ENTRY

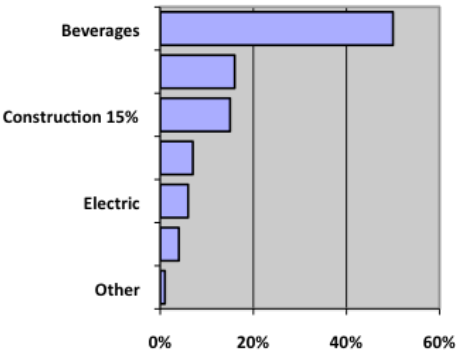
At least five states of Mexico are organized in clusters that control the supply chain for companies adhered to those clusters: Mexico City, Puebla, Queretaro, Baja California and Nuevo Leon. This competitive and growing market is attracting foreign-direct investment (FDI) into Mexico. The first three quarters of 2014 reported a total of \$15.3 billion, 9% of which was in the plastic sector. This makes Mexico the tenth largest FDI receiver in the world.

U. S. companies interested in this market should connect with cluster suppliers or become members of such clusters to gain participation and firsthand information of demand and purchasing needs. Appointing distributors is also a good approach; these are companies with a large customer base and experienced importers. Interested companies are invited to contact their nearest Export Assistance Center for more details about the products and services for the U. S. exporter.

CURRENT DEMAND

Data from the U.S. Department of Commerce's Trade Stats Express demonstrate that the two main American exports of plastic products to Mexico in the 326 series of the North American Industry Classification System (NAICS) are plastic and rubber products. In 2013, U.S. exports of plastic products and rubber totaled \$9.2 billion with \$4.78 billion corresponding to NAICS 32619 (other plastic products) and \$1.5 billion to NAICS 32621 (tires). The largest demand, by volume, of general plastic products originates from the states of Nuevo Leon, Jalisco, and the State of Mexico, as well as Mexico City. However, when the automotive sector is included, the list grows to include the states of Puebla, Queretaro, San Luis Potosi, and Guanajuato.

Figure 1: Plastic demand by segment



According to industry sources, the Mexican plastic industry is driven heavily by the automotive sector, which has reported a record output in manufactured units, as well as the food and beverage industries that have increased their plastic packaging consumption. Sources contend that 45% of national consumption of plastics corresponds to packaging, while the remaining balance is shared among agriculture, construction and home appliances. While Mexico has several injection molding manufacturers, there is also a substantial need for high quality molds. Mexico lacks specialized mold making firms. Demand is covered by foreign firms, predominantly from Japan, Korea, India, Canada and European countries.

MARKET ISSUES AND OBSTACLES

In today's Mexico, the opportunities for petrochemical derivatives have increased and the plastic industry will take full advantage of it. There are actually no obstacles to importing companies in Mexico to buy and distribute plastic resins. Exports from Mexico do not have restrictions either. Some plastic components may qualify for special import tariffs depending on their composition and country of origin. Parts made in the USA with U.S. materials are free of tariffs.

TRADE EVENTS

- Name of Event:** Plastimagen Norte

Date: March 3-6, 2015

Location: Cintermex, Monterrey, MX

Description: The northern edition of Plastimagen
- Name of Event:** Plastimagen

Date: November 2015

Location: Centro Banamex, Mexico City

Description: Largest plastic exhibition in Mexico
- Name of Event:** Expo Plasticos

Date: November 2015

Location: Guadalajara, Jal.

Description: Regional Trade Fair (Bajio)



CAPITAL Warsaw
POPULATION 38.3 million
GDP US 516 billion
CURRENCY Polish Zloty PLN
LANGUAGE Polish



U.S. Commercial Service Contact Information

NAME Anna Janczewska
POSITION Commercial Specialist
EMAIL Anna.Janczewska@trade.gov
PHONE +48 22 625 4374

SUMMARY

In Poland, the demand for plastics in the processing industry in 2013 amounted to 2.9 million tons, accounting for 6.4% of total plastic consumption in Europe and ranking Poland sixth behind Germany, Italy, France, UK and Spain. The plastics industry in Poland consists of plastics manufacturers, compounders, plastics-processing companies as well as manufacturers of machines for plastics processing. The economic condition of this industry is very good. In 2013 Poland's industrial production increased by 2.7%, while the EU industrial production index decreased by 0.4% during the same time.

As estimated by PlasticsEurope (<http://www.plasticseurope.org/>), the plastic industry in Poland consists of more than 7.300 firms employing in excess of 138,000 people. The total turnover of this industry amounted to over \$20 billion. The per capita consumption of plastics amounts to approximately 70kg in Poland and is still much lower than the consumption noted in highly-developed European states (amounting to more than 100 kg).

The plastics industry in Poland is comprised of plastics manufacturers, compounders (producers of mixes and composites), converters (manufacturers of market products from plastics), and producers of machinery for the processing of plastics. Representatives of the entire distribution chain should also be included in the industry (importers, distributors, wholesalers) as well as organizations that handle recycling.

MARKET ENTRY

Poles hold the United States in very high regard and believe U.S. products to be both reliable and of high quality. U.S. companies interested in establishing business ties in Poland should take advantage of this. American companies interested in expanding into the Polish market must devote time and effort toward promoting their products. Possible ways for American firms to do so include participating in Polish trade shows (listed below), establishing contacts with Polish companies and institutions, and advertising in local trade publications. For companies interested in selling in Poland, the best strategy is either to find a local Polish partner to be a sole distributor/agent or to register and establish a representative office in Poland. In any case, it is important to maintain a very close business relationship with potential Polish buyers. It is highly recommended that U.S. companies participate in appropriate trade fairs and advertise in professional magazines. Price is a decisive factor for the lower end of the market, while the high-end market focuses on performance and quality. Also, U.S. machinery suppliers need to ensure that they have immediate repair service and easy spare parts readily available. Moreover, technical as well as training support is expected.

CURRENT DEMAND

According to the Industrial Chemistry Research Institute, these are the most required technologies that would significantly help in developing the Polish plastic processing industry:

- Technology for production of styrene and polystyrene.
- Technology for production of engineering polymers.

The Polish market also offers a potential for "bio" plastics. The expansion of bio-polymers into the market is strongly supported by the existing regulations. For example a ban on free distribution of plastic bags was introduced in Poland in 2012. Polish companies also see a potential in bioPET bottles already being introduced by CocaCola and Pepsi.

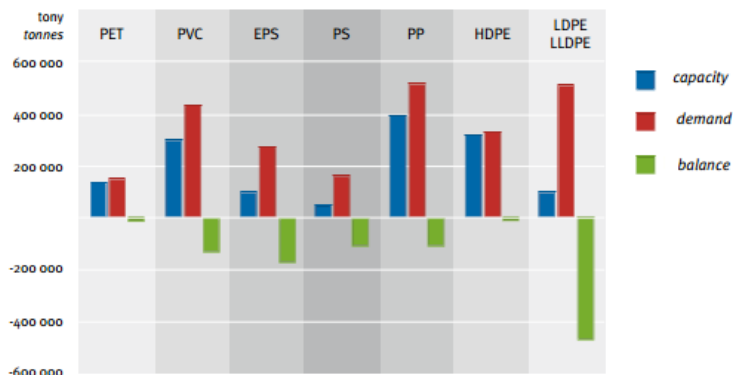
Another area of great potential is plastic recycling, as the Polish plastics industry sees over 60% of its products ending up in landfills. Recycle companies recover only 300-350 thousand tons of plastics annually, mostly packaging waste. In 2012, a total of approximately 1.48 million tons of this type of waste was generated in Poland. According to PlasticEurope Polska estimates, Poland could additionally process 8.5 million tons of plastic waste totaling 7.5 billion euro by 2020.

DOMESTIC PRODUCTION AND FOREIGN IMPORTS

At the beginning of the 1990's, the average Pole used only 17 kg of plastics annually, approximately four times less than other EU countries. This gap has since shrunk, with the average now 70 kg of plastics, or 25 kg less than the average used in the rest of the EU. Polish companies manufacture basic commodities such as polyolefins (Bassell Orlen Polyolefins), polyvinyl chloride (Anwil), polystyrene (Synthos), polyethylene terephthalate – PET (Indorama SA) as well as some engineering thermoplastics such as polyamide 6, POM (Azoty Group SA, Rhodia). Other materials manufactured include polyurethane systems (BASF, PCC Rokita) as well as polyester and epoxy resins (Lerg SA, ZCh Organika Sarzyna). According to PlasticsEurope estimates, there are 230 firms employing over 6.5 thousand

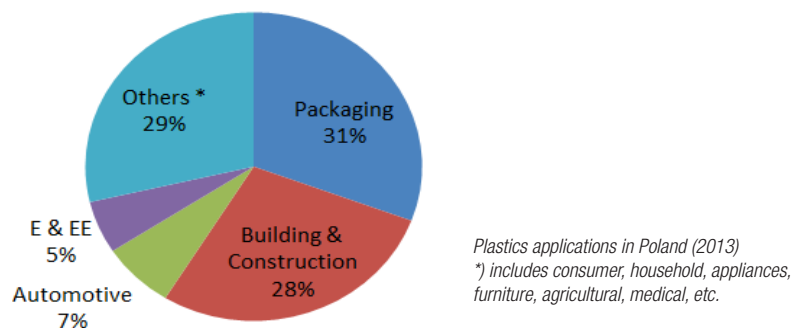
people. In addition, all the leading worldwide plastics manufacturers are present in the Polish market through their local representatives. When comparing manufacturing capacities of the Polish plastics manufacturing facilities with the demand for plastics in the processing sector, it becomes clear that the demand substantially surpasses domestic production in all categories of polymers:

Local plastics production capacities versus demand in Poland



Plastics processing companies constitute the largest subgroup of the Polish plastics industry. The most significant entities among these companies are the manufacturers of rigid and flexible packaging, pipes and profiles for applications in the construction industry. Other important entities are cable and film manufacturers. Though most of the companies from this sector are small and “micro” firms, (over 7.3 thousand firms employing 138 thousand people), it is the largest developing sector. The capacity of plastics processing facilities has been on a constant rise in the recent years, often applying leading-edge technological processing solutions. The total demand for plastics of the entire Polish industry reached 2.9 million tons in 2013.

Polish industry reached 2.9 million tons in 2013.



The types of plastics that were used most often for processing were polyethylene (LDPE, LLDPE, HDPE) – approximately 30%, polypropylene – 17% and PVC – 15%.

In terms of the U.S. market position, although the import numbers are not large, American business is well defined in Poland by such suppliers of raw materials as DuPont, Dow, Conoco ExxonMobil Chemicals, Ashland and others. The production figures are lower because most of these companies have production facilities or distribution centers in Western Europe from which they import directly. While none of these companies have production facilities in Poland, U.S. companies are strongly represented in Europe.

MARKET ISSUES AND OBSTACLES

Machinery: U.S. firms exporting to Poland need to comply with local and European regulations, such as the CE mark required for machinery. The CE mark (including conformity statement and technical documentation of the country of import) is required for:

- components regulated by the EMV Directive 2004/108/EC (electro-magnetic compatibility);
- machinery covered by the machinery safety regulation 2006/42/EG of May 17, 2006;
- equipment covered under the EU Low Voltage Directive 73/23/EWG.

Materials: If U.S. materials are exported to Poland, the following regulations are of particular importance:

- REACH (Registration, Evaluation and Authorization of Chemicals).
- CLP-Regulation (Classification, Labeling and Packaging of Substances and Mixtures)

Information on the above is available from: <http://echa.europa.eu/web/guest/regulations>.

Certification of bio-plastics: The European Bioplastics Association is fostering the use of bio-plastics throughout Europe and also develops the appropriate standards. Certification is on a voluntary basis. Further details are available from: <http://en.european-bioplastics.org/standards/certification/>

TRADE EVENTS

Name of Event: International Fair of Plastics and Rubber Processing PLASTPOL

Date: May 27 – 30, 2014

Location: Kielce

Website: http://www.targikielce.pl/index.html?k=plastpol_en&s=index

Description: The PLASTPOL fair showcases all kinds of machinery and equipment used in the plastic processing industry; tools and molds; plastics and components; recycling technologies etc. It is one of the largest exhibitions in this business sector in Europe. The 2011 event presented hundreds of novelties and 680 exhibitors from as many as 31 countries.

POLAND

Name of Event: RubPlast EXPO
Date: November 13 -15, 2013
Location: Sosnowiec
Website: <http://exposilesia.pl/rubplast/0/0/uk/>
Description: The RubPlast EXPO, Fair of Plastics and Rubber Processing Industries showcases machinery and equipment for plastics and rubber processing, forms and tools, plastics, rubber compounds, composites, pigments, recycling technologies, peripheral systems and devices.

Name of Event: Plastic and Rubber Fair EPLA
Date: March 26 - 28, 2014
Location: Poznan
Website: <http://www.epla.pl/en/>
Description: The EPLA trade show is aimed at the plastics and rubber industry and focuses on raw materials. EPLA is paralleled by a series of professional lectures and talks. One of its key features will be a convention organized by the Plastics Technology Club – the first Polish institution to gather designers and technologists of the plastics processing industry in one event.

AVAILABLE MARKET RESEARCH

Poland: Country Commercial Guide 2014

RUSSIA



CAPITAL Moscow
POPULATION 146,100,000
GDP US\$ 2.1 trillion
CURRENCY Ruble
LANGUAGE Russian



U.S. Commercial Service Contact Information

NAME Darya Kolesnikova
POSITION Commercial Specialist
EMAIL Darya.Kolesnikova@trade.gov
PHONE +7 495 7285579

SUMMARY

The Russian polymers market has been dynamically developing during the last 12 years. Production of all polymers in Russia has reached 5.4 million tons. The production, consumption, and application of polymers per capita equals 38, 53, and 67 kgs, respectively. The lack of processing volume is estimated at 1.5 to 2.0 million tons.

Russia became a member of the World Trade Organization (WTO) in 2012. According to the country's WTO entry terms, the import tariffs levied on most polymers are due to fall from the current 10% down to 6.5% by 2018.

From 2007-2011, polymer demand grew faster than local production. It made polymer imports soar by 50% and led to an increase in polymer prices, especially for polyethylene. With the increase in production volumes, new international companies have entered the Russian market. According to Plastinfo analytics, the 2013 market volume of tonnage polymers (polyethylene [LDPE, HDPE, LLDPE] polyvinyl chloride [PVC-C], polypropylene, or PP and polystyrene) in Russia decreased by 4% and amounted to about 4.5 million tons. According to the statistics of State Customs of Russia, total import of base polymers for 2013 decreased by 15%, whereas exports more than doubled. Russia had been forecast to discontinue imports of PP and become an exporter in 2014. However, some major import substitution projects were finalized later than previously planned, delaying PP import substitution.

The plant Stavrolen has started to work at full capacity, which has led to the 30% reduction of imports in the market of HDPE. However, shipments of HDPE abroad increased threefold. Domestic production of PP has grown over 20% as a result of the launch of two production plants, “Polyom” (“Titan”) and “Tobolsk Polymers” (SIBUR). PP export shipments have increased more than 5 times in 2013, while imports decreased by 23%. Base polymers decreased by 15% and exports more than doubled.

Russia’s leading petrochemical producer Nizhnekamskneftekhim (NKNKh) has pledged to build new major polymer facilities in coming years. NKNKh said it still aims to finish construction of its units to produce 600,000 tons a year of polyethylene (PE) and 400,000 tons a year of PP in 2017.

According to statistics from the Customs Service of Russia, for the first half of 2014, the volume of imports of equipment for processing plastics and rubber amounted to \$491 million (without taxes and duties), which is 0.8% more than the same period of 2013. At the same time, the total weight of imported equipment decreased by 14.6% and amounted to 25,000 tons.

There are more than 300 plastics processors in Russia. In the first half 2014, the import of extrusion equipment in Russia decreased by 7.7% in value terms and amounted to \$130 million (without taxes and duties). According to the analysis of statistics of the Russian Federal Customs Service for the period, 601 units of extrusion equipment (lines and separate extruders) were imported, which is 29.7% less than in the first half of 2013. Also, during the same period, imports of extrusion-processing equipment decreased 6.5% (by weight) to 7,300 tons. Russian imports extrusion equipment from 24 countries; however, 90% of all machines are manufactured in China, Germany, Taiwan, Turkey and Italy.

In 2013, investments of injection molding machines represented a 20 percent share of total investments in equipment for the processing of plastics and rubber. Sales of injection-molding machines in Russia in the first half of 2013 increased compared to 2012. According to the Russian Customs statistics, imports of injection-molding equipment in Russia in 2012 decreased by 15.2% compared to 2011 and amounted to 1,359 machines. At the same time, the total value of the set injection-molding machines decreased by 7.1% and reached \$139.4 million. There are no exports of injection-molding machines from Russia.

The average unit value of imported equipment for plastics processing by injection, extrusion and blowing increased from 8% to 57%. The data includes all types of equipment for primary processing of polymers and rubber, and all types of machinery and tools for post-processing of semi-finished or finished products, as well as peripheral equipment, tooling, spare parts and accessories. Import duties on all types of equipment have not changed and still equal 0%.

MARKET ENTRY

With a vast landmass, extensive natural resources, more than 142 million consumers, a growing middle class and acute infrastructure needs, Russia remains a promising market for U.S. exporters. Therefore, many businesses tend to approach the Russian market on a regional basis. Most new entrants start in Moscow and then move into the regions either through an existing distributor or by seeking additional distributors in those areas. With Moscow and St. Petersburg being major cities and business centers, many Western firms have representatives in these locations. Some companies have successfully entered the Russian market by starting their distribution in outside key regions that offered special market features and important industry sector concentrations and then continued to expand into other areas. Western Russia, especially Moscow and St. Petersburg, has well-established distribution channels that expand rapidly toward southern Russia, the Volga region, Urals, Siberia and the Russian Far-East. To succeed in Russia, it is important to choose sales targets and distributors carefully.

Foreign companies entering Russia usually do not to rely solely upon the services of an agent. Distributors and representative offices, however, often employ agents in the Russian regions in order to promote their products. The most common market entry strategy is to select a good distributor or several distributors (depending on the product).

Developing business in Russia is resource-intensive, requiring serious commitments of time, personnel and capital. Among other activities, it requires the following:

- Conducting market research, such as with the U.S. Commercial Service’s Gold Key or International Partner Search services, to identify opportunities and potential Russian business partners.
- Conducting due diligence, such as with the U.S. Commercial Service’s International Company Profile service, to ascertain the reliability of business partners.
- Consulting with U.S. companies already in the market, as well as with the U.S. Commercial Service and business organizations, such as the American Chamber of Commerce and U.S. – Russia Business Council.
- Communicating regularly with Russian business partners to ensure common understanding of expectations.
- Frequent travel to Russia is strongly recommended to establish and maintain relationships with business partners and to understand changing market conditions.
- Maintaining a long-term timeframe to implement plans and achieve positive results.
- Complying with Russian laws and regulations (taxes, customs, labor, etc.) – local tax, legal and government relations advisors are strongly recommended.
- Conducting business in accordance with all applicable U.S. laws, as well as standard U.S. and international business practices.
- Utilizing letters of credit or other secure financing vehicles – avoid sales on open account.
- Developing working relationships with national, regional and/or local governments and considering implementing corporate social responsibility programs.
- Patience, perseverance and perspective are keys to success in Russia.

CURRENT DEMAND

Domestic producers of chemical and plastic materials can currently meet only 50% of market demand. This market situation provides good prospects for chemicals and plastics from U.S. suppliers. Market demand for polymers and high-tech chemicals is continuing to grow, offering opportunities for U.S. manufacturers. Other products in demand include polyethylene materials, PVC sheets, PVC films (furniture, posters), polyolefin films, PET films, etc.

Investment in the chemical sector is crucial for the Russian economy, which provides U.S. machinery suppliers with an opportunity to sell their chemical and plastic-processing equipment. The Russian government's plan for the development of the chemical industry, noted above, will be crucial for funding these purchases. Both injection molding machines and extrusion equipment are in demand.

Chemical industry products are sold as unbranded commodities. As a result, marketing strategies are greatly simplified. A local company would be just as likely to buy from a new player on the market as from an established producer. The processes and formulas used to manufacture chemicals used by the Russian industry have been around for decades, in many cases without intellectual property restrictions.

The competitive situation in the chemical market will force local producers to upgrade their technologies to meet growing demand for new materials and products. Over the next five years, the best opportunities for U.S. exporters will be production equipment and materials that can enable local manufacturers to gain a higher market share with quality chemical products, such as PVC, ABS, and Polyethylene.

MAIN COMPETITORS

The Russian plastics market is very competitive. Although this market can be considered lucrative for US companies, it is important not to underestimate imports from other supplying countries, such as Germany, Italy, Austria, France, Portugal, South Korea, China, Belgium, and Taiwan which have been present in this market for years.

As part of Russia's accession package to the WTO and as stated in the Working Party Report, Russia has agreed to ensure that certain state-owned or state-controlled enterprises will offer companies from the United State and other WTO member states market opportunities on a non-discriminatory basis. Thus, Russia will need to ensure that Gazprom, for example, will make its purchases and sales of chemicals based on market considerations. This will help to make competition more transparent.

MARKET ISSUES AND OBSTACLES

Russia can be a challenging market. U.S. companies should choose local partners wisely and take the time to get familiar with the local business environment. Taking shortcuts in evaluating business opportunities and in selecting local partners is not advisable. The Russian economy is still in the process of transitioning from a closed, centrally-planned economy to a more open market economy, of which U.S. companies interested in doing business in Russia should be aware. Moreover, basic business information about regulations, company ownership and credit worthiness are not always easy to find, and the regulatory framework continues to evolve, requiring companies to stay up-to-date with changes.

The recent events in Ukraine and Crimea have changed the landscape of the bilateral trade and investment relationship between the United States and Russia.

The United States has suspended government-to-government economic cooperation with Russia on many fronts, including our bilateral trade and investment working group that sought to expand economic and commercial ties. Within these parameters, U.S. companies can still export their goods and services to Russia and continue working with their Russian partners to sustain and increase their sales in this market. However, companies should continuously monitor any developments concerning the United States' political and economic relationship with Russia.

TRADE EVENTS

Name of Event: Plastics Industry Show (Industria Plastmass) 2015

Date: October 19-22, 2015

Location: Expocenter, Moscow

Website: <http://www.plastics-expo.ru/en/>

Description: Plastic Industry Show 2015 is a special segment of TECHNOFORUM show that brings together key trends in mechanical engineering and material processing, such as plastics, metal-working, glass engineering and wood and stone processing. The Plastics Industry Show 2015 will showcase all segments of the polymer market from manufacturing to recycling, including: machinery and equipment, molds and dies, polymer materials, synthetic resins, raw materials and auxiliaries, as well as the packaging segment: materials and equipment, environmentally-friendly technologies and polymer waste recycling. The number of target customers is over eight thousand people from various Russian regions, the CIS and Baltic states. Fifty percent of visitors are executives of their companies.

RUSSIA

Name of Event: Interplastica 2016
Date: January 26-29, 2016
Location: Expocenter, Moscow
Website: www.interplastica.ru
Description: Interplastica is the industry's most important trade fair for Russia and the region:

- almost 700 exhibitors from 28 countries
- more than 20,000 visitors from Russia and the CIS states
- net occupancy of 13,500 square meters
- held annually alongside UPAKOVKA / UPAK ITALIA

AVAILABLE MARKET RESEARCH

Russia – Country Commercial Guide 2014

SPAIN



CAPITAL Madrid
POPULATION 47 million
GDP US\$ 1.4 trillion
CURRENCY EUR
LANGUAGE Spanish



U.S. Commercial Service Contact Information

NAME Carmen Ribera
POSITION Commercial Specialist
EMAIL carmen.ribera@trade.gov
PHONE +34 91 3081544

SUMMARY

Plastics are an important industrial sector in Spain. Spain is the ninth-largest global producer and the seventh largest consumer of plastics. The plastics industry is comprised of 4,000 companies with more than 75,000 employees. In 2013, the plastics industry's total sales volume was estimated at 23 billion euros which accounted for 2.2% of Spain's total sales of industrial products.

Plastic production in Spain decreased 0.9% in 2014 and demand was stabilized. It is continuing to recover in line with the slow recovery of the Spanish economy. Market insiders indicated that in 2014 the production of plastics in Spain would remain stable. Approximately 45.8% of all Spanish plastics materials were processed into packaging in 2013, followed by the second-largest plastics consumer, the building and construction industry.

Raw Materials

In 2013, Spain consumed 4.2 million tons of plastic, almost 75% in standard plastics (HDPE, LDPE, PP, PVC, PS, EPS, PET and EVA) equaling 3.2 million tons. The second most important group was technical plastics, followed by thermosets. The consumption of other plastics was 191,249 tons. Technical thermoplastics represent 10% of total consumption in Spain (309,088 tons) during 2013.

Plastic machinery and molds

The most represented subsector in the Spanish market, in terms of number of companies, is injection machinery, with sales of 48 million euros in 2013. The development of injection machinery remains fairly stable compared with previous years. There was an increase of 3% in consumption in the Spanish market in 2013. The majority of exports of injection machinery are shipped to Germany, Switzerland and Italy, while the prominent suppliers are Portugal, Italy and Morocco.

Plastic Recycling

According to the last CICLOPAST (Spanish Association of Plastic Recycling) report, in 2013, Spain recovered 48% of its plastics, recycling 30% (616,000 tons) with a value of 18% in energy-efficiency. The recycling of packaging currently represents 77% of the total of recycled plastic, and agriculture remains the second-most important sector in the recycling of plastics in Spain, with 10%.

MARKET DATA

Plastic production in Spain has experienced a gradual but progressive recovery during 2013 and the first half of 2014 despite levels of production being 28% lower than those before Spain's economic crisis. This emerging recovery has influenced a significant rebound in construction, which had fallen to levels below 50% from the beginning of the crisis.

The Spanish plastic industry's production and processing of raw materials parallels manufacturing in general, with positive development during 2013 and the first half of 2014, remaining at levels of about 22% less than those at the start of Spain's economic crisis. This refers to both production of raw materials and processing.

Plastic consumption in 2013, compared to 2012, has remained stable. The standard plastic consumption grew by 4.5% at the expense of maintaining production and increase in imports.

Main industry consumers of plastic materials in Spain include: packaging (46%), construction (12%), automotive (9%), electricity (6%). In recent years, the use of plastic materials in the agricultural sector has increased.

MARKET ENTRY

Despite the recent downturn in the Spanish plastics market, today's plastics industry in Spain has opportunities for U.S. firms. It is concentrated in three main geographical areas - Catalonia, Valencia and Madrid. The majority of the agents are located in Madrid and Barcelona. The local plastic industry's main sales channels are through professional agents, representatives or joint ventures with local companies.

Promotion of products is necessary to succeed in the Spanish market. Methods of promotion include advertising in local trade publications, establishing offices in Spain and participating in trade shows.

CURRENT DEMAND

Environmental concerns were one of the main reasons for the increased demand of biodegradable plastics. Domestic production of biodegradable plastics is non-existent in Spain. Therefore, Spanish companies need to import bio-degradable plastic materials, offering U.S. manufacturers good market opportunities. Demand for medical polymers and elastomers are also high.

There are also positive growth prospects in the Spanish market for packaging materials, especially in the medical and cosmetics sectors.

MARKET ISSUES AND OBSTACLES

US firms exporting to Spain need to comply with local and European regulations, such as the CE mark required for machinery, and REACH (Registration, Evaluation and Authorization of Chemicals).

Import procedures are governed by international trade regulations and technical specifications essentially established by the E.U., and Spain has incorporated those specifications into its regulations. Information on standards can be obtained from AENOR, the Spanish Association of Standards and Certification (see: <http://www.aenor.es/>).

TRADE EVENTS

EQUIPLAST – The International Plastics and Rubber Event

Location: Barcelona, Spain. Organized by Fira de Barcelona.
(<http://www.equiplast.com>)

Last show: October 2014. Next exhibition: 2017. This trade show is organized every three years in Barcelona covering the plastics, chemicals and surface-treatment sectors. The show includes products, equipment, machinery, processes and supplies in the chemical, petrochemical, plastics and general industry sectors.

RESOURCES & CONTACTS

ANAIP, Spanish Plastics Association: www.anaip.es

AIMPLAS, Technological Institute of Plastic: www.aimplas.es

CEP, Spanish Center of Plastics: www.cep-plasticos.com

CICLOPAST, Spanish Association of Plastic Recycling: www.ciclopast.com



CAPITAL Stockholm
POPULATION 9.4 million
GDP USD 538 billion
CURRENCY SEK
LANGUAGE Swedish



U.S. Commercial Service Contact Information

NAME Tuula Ahlstrom
POSITION Commercial Specialist
EMAIL tuula.ahlstrom@trade.gov
PHONE +46 8 783 5396

SUMMARY

The plastics industry is one of the traditional manufacturing industries in Sweden, and together with other heavy manufacturing sectors it accounts for over 20% of the GDP and for 50% of the exports. The Swedish plastics industry is still experiencing a slight growth and the companies are increasingly exporting their products, mainly to other EU countries.

There are good opportunities in the market for U.S. manufacturers of energy-efficient and innovative plastic-processing machines that save the processor raw material and time and minimize waste. As the use of bio-based plastic materials is growing in Sweden, there is a solid niche for machinery that processes durable bio-based plastic products using nanotechnology.

MARKET ENTRY

U.S. products are generally very well received in Sweden and the plastics industry is no exception. The most effective way for a U.S. company to enter the Swedish market is to appoint a local distributor. Many of the Swedish distributors also cover one or more of the other Nordic countries: Norway, Denmark and Finland.

Energy efficiency and sustainable production are some of the key drivers of the Swedish manufacturing industry and they play a central role in the machinery-procurement process. U.S.-made plastics production machinery is traditionally considered to be of high quality and reliable. The Swedish market also needs to produce more with less energy and be able to utilize bio-based raw materials.

The Swedish manufacturing industry aims to reduce its energy consumption by 50% by 2030, while also reducing the process steps by 50% through optimal use of direct manufacturing and free-form design.

U.S. machinery suppliers also need to provide the Swedish/Nordic distributors with sufficient technical training and after-sales service packages.

CURRENT DEMAND

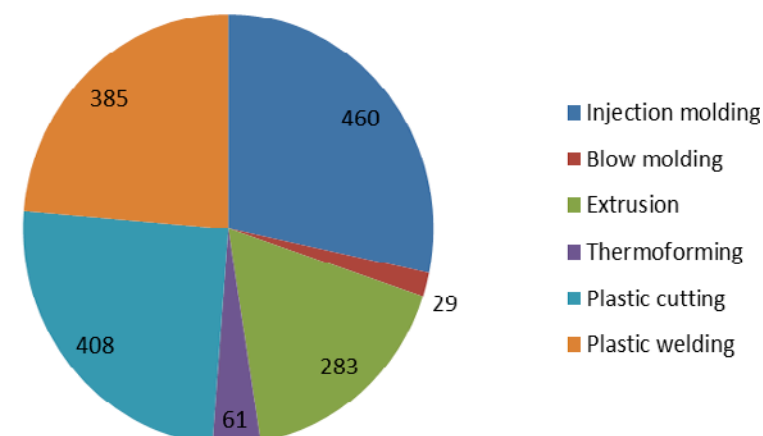
A majority of the plastics production companies are suppliers for other manufacturing and assembly industries. Any economic or raw material downturn affecting one of these industries is affecting the plastics processing industry, as well, as plastics are today found in everything from cars to furniture, to construction materials and mobile phones. For example, the automotive industry in Sweden has gone through several structural changes in recent years, resulting in a diminished demand for e.g. advanced polymers. This has caused many of the plastics production companies to look for export markets, which has proved to be very lucrative.

In order to stay competitive in both the domestic and, increasingly, the international markets, Swedish plastics processing companies are constantly looking for new, more effective production methods that improve the properties, performance and durability of the plastics, while lowering the production cost.

Sweden is striving for fossil neutrality and promoting and subsidizing sustainable production technologies in all industries. Swedish plastic production and processing companies are thus looking into efficient bio-based and biodegradable plastics production. The arguments for producing bio-based plastics include strategic (diminishing the use of raw oil), environmental (contributing to the lowering of CO2 emissions) and political aspects (supporting renewable raw material production, such as sugar, soy, corn, cellulose and algae.)

MAIN COMPETITORS

There are some 2,000 companies in the plastics-processing market in Sweden. While the majority are plastic processing companies, there are also a number of machinery manufacturers, either foreign company subsidiaries and sales offices or small-niche domestic manufacturers of machinery for plastic film and granules.



SWEDEN

Most of the largest international plastics machine manufacturers from EU, U.S. and Asia are present in Sweden mainly through local distributors.

To keep their competitive edge, machinery manufacturers should develop machines that save energy, material, increase the effectiveness of the manufacturing process and minimize unrecyclable waste. The market for plastics will keep growing, as there is a demand for lighter products and components and smaller sizing.

MARKET ISSUES AND OBSTACLES

When it comes to importing plastics production machinery, Sweden offers an open market with only few regulations and impediments to international trade. Since 1995, Sweden has applied EU external tariffs for imports from outside the European Union. Once a machine is approved for sale in the EU, it is also approved for sale in Sweden. The customs tariff on plastics-production machinery varies between 0% to 6% and a 25% VAT is assessed on all imported goods.

TRADE EVENTS

Name of Event: Elmia Subcontractor
Date: November 10-13, 2015
Location: Jönköping, Sweden
Website: <http://www.elmia.se/en/subcontractor/>
Description: Northern Europe's leading trade show for subcontractors in the manufacturing industry

Name of Event: Plastteknik Nordic
Date: April 13-14, 2016
Location: Malmö, Sweden
Website: http://www.easyfairs.com/events_216/plastteknik-nordic-2016_59351/plastteknik-nordic-2016/
Description: Scandinavia's largest exhibition for the polymer industry

Name of Event: Elmia Polymer
Date: April 21-24, 2015
Location: Jönköping, Sweden
Website: <http://www.elmia.se/en/polymer/>
Description: Scandinavia's largest trade fair focusing on injection molding, extrusion and compounding.

AVAILABLE MARKET RESEARCH

Country Commercial Guide 2014

TURKEY



U.S. Commercial Service Contact Information

CAPITAL Ankara
POPULATION 76,667,864 (2013)
GDP \$ 1.443 billion (2013)
CURRENCY Turkish Lira
LANGUAGE Turkish

NAME Berrin Erturk
POSITION Senior Commercial Specialist
EMAIL berrin.erturk@trade.gov
PHONE +90 232 441-2446

SUMMARY

The plastics industry is one of the youngest and most rapidly developing manufacturing industries in Turkey. The Turkish plastics industry holds a 2.4% market share in the international plastics industry, ranking seventh worldwide with its process capacity, and holds the second place, following Germany.

Due to the global crisis, Turkish firms in the plastics industry were forced to find new foreign markets to substitute for the shrinkage in both the domestic and foreign markets, and they were successful. Diverse Turkish plastics markets including raw materials, machinery and processed products will continue to be one of the major plastic centers in the region.

The industry currently employs more than 250,000 people. Nearly 14,000 companies work in the plastics industry, of which 6,500 are manufacturers and almost 99% are small- and medium-sized enterprises (SMEs). Of the manufacturing companies, the majority are in the processed plastic products field and 252 of these firms have foreign capital shares, and the largest five (German, Italy, French, Dutch, and Iranian) making up 45% of the total.

MARKET ENTRY

Turkey's January 1, 1996 accession to the European Union's customs union has resulted in zero duties for imports from the EU countries and the same agreement has led to general reductions in duty rates assessed on non-EU third-country imports.

All plastic-processing machinery is subject to a 1.7% customs duty, whereas customs duty for the majority of plastic processed products is 6.5%. Customs duty for plastic raw materials is also 6.5%. These duties are assessed on CIF prices on each item for imports from non-EU countries, including the United States, with exemptions. As part of the same agreement, all technical specifications that are required in the EU countries also apply in Turkey, including REACH, ISO, CE Mark, etc. All products,

both imported and locally manufactured, are subject to an additional 18% percent value-added tax (VAT). VAT is also calculated based on the CIF value for imported products.

U.S. firms interested in entering the Turkish market should consider having a local distributor/representative. A local partner not only helps U.S. firms market their products, but also handles import procedures and provides after-sale services.

CURRENT DEMAND

Opportunities remain in the plastic raw materials market.

The table below breaks down the local production and import shares of Turkey's plastics raw materials supply:

Type of plastic raw material	Local Production (%)	Imports (%)
PP	6	94
PE	20	80
PVC	13	87
PS	9	91
Others	10	90
TOTAL	12	88

Source: PAGDER

The plastics production machinery local sales market that of \$527 million is dominated by injection machinery (31%), followed by press and others (23%), extrusion machinery (12%), parts and components (5%), thermoforming (4%), and blow molding (4%).

In the processed plastic products market, the following products can be marketed effectively: plastic sheets, self-adhesive sheets, foils, strips, and films and other flat sheets of plastic, tubes, hoses, pipes, and fittings, kitchenware and other household goods of plastics. Total local consumption of processed plastic products reached \$32.7 billion in 2013.

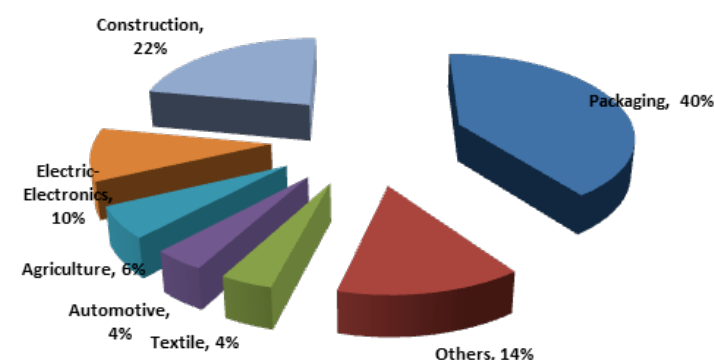
MAIN COMPETITORS

In Turkey, local production accounts for 12% of the total demand for plastic raw materials. Turkey has one major integrated petrochemical production facility, Petkim, which supplies plastic materials to the plastic processing industry. It was state-owned, but was privatized recently.

TURKEY

The top supplier countries of plastic raw materials include: Saudi Arabia, Germany, Belgium, South Korea and United States. The top supplier countries of plastics production machinery include: Germany, China, Italy, Austria and Taiwan.

The annual processing capacity in Turkey is 8.1 million tons per year with over 5000 plastic processing firms manufacturing hundreds of different products in Turkey. A breakdown of the consumption of plastic raw materials by industry is shown below:



Source: PLASFED

As can be seen from the above graph, the packaging industry leads all other industries in plastic consumption. There is an increasing trend to package goods to comply with EU standards. Processed plastic materials consumption in Turkey is estimated at 7.2 million metric tons. China, Germany, Italy, France and South Korea rank the first five as suppliers of processed plastic products.

MARKET ISSUES AND OBSTACLES

Currently, there are no significant trade barriers for U.S. imports. Turkey's imports are regulated by an annual import regime published by the Undersecretary for Treasury and Foreign Trade (UTFT). The Import Regime sets forth import rules and regulations for the year, customs duties and surcharges on imported products and lists of "investment" capital equipment machinery, the importation of which is encouraged by the government since it adds value for Turkish exports.

Turkey's accession to the European Union's customs union in January 1996 resulted in zero duties for imports from EU countries and the same agreement led to general reductions in duty rates assessed on non-EU third-country imports. All plastic processing machinery is subject to a 1.7 percent customs duty, and almost all plastics raw materials have a 6.5 percent import duty based on CIF (Cost, Insurance, and Freight) value for imports from non-EU countries, including the United States.

TURKEY

TRADE EVENTS

- Name of Event:** Putech Euroasia 2015
Date: November 12 – 14, 2015
Location: Istanbul Expo Center
Website: <http://www.putecheurasia.com/index.php>
Description: polyurethanes industry firms, every two years, and the first in 2009
- Name of Event:** Middle East Manufacturing Machines and Related Industries Fair 2015
Date: March 26- March 29, 2015
Location: Tuyap Diyarbakir Exposition Center
Website: <http://www.ortadoguuretimmakinelertifuari.com/>
Description: 6th Metal Processing Machinery, Electric, Electronic, Automation, Hydraulic – Pneumatic Systems, Plastic Manufacturing Machinery and Plastic Raw Materials, Mould and Loading, Warehouse, Handling Fair

AVAILABLE MARKET RESEARCH

Turkey – Country Commercial Guide 2014
Plastic Raw Materials Market in Turkey 2012

UNITED KINGDOM



CAPITAL London
POPULATION 64 million
GDP US\$ 2.52 trillion
CURRENCY GBP
LANGUAGE English



U.S. Commercial Service
Contact Information

NAME Claudia Colombo
POSITION Commercial Specialist
EMAIL claudia.colombo@trade.gov
PHONE +44 20 7894 0443

SUMMARY

The United Kingdom has the sixth-largest economy in the world and is a major international trading power. Highly developed, sophisticated, and diversified, the UK market is the second largest export market for U.S. services exports and the sixth largest for U.S. goods exports in the world. With few trade barriers, the United Kingdom is in fact the entry market into the EU for more than 43,000 U.S. exporters. Over 7,500 U.S. firms maintain a presence in the United Kingdom, many of which serve as regional headquarters for companies covering Europe, the Middle East and Africa.

The UK plastics industry is a dominant player worldwide in the three core sectors that make up the plastics industry: material and additive manufacture, material processors and machinery manufacture. Sales account for approximately \$30 billion (corresponding to over 1% of UK GDP) and the industry employs 180,000 people.

With the UK's plastics processors consuming 4–8 million tons of material the UK remains one of the top five processors of plastics in the EU. The raw material production component of the sector is capital-intensive and the large bulk of personnel are employed in plastics processing which, despite being increasingly automated, is still relatively people-intensive due to the many individual tasks that need to be accomplished in sectors such as insert and assembly work. Table 1 provides an overview of the plastic industry in the UK.

Materials Processed	4.8 million tons
Plastics materials produced	2.5 million tons
Consumption Growth Average p.a.	2.5%
Processor sales turnover	\$21 billion
Value of exports	\$10.7 billion
People employed	180,000
Number of primary processors	3,000
Companies in the plastics industry	7,500
Plastics industry turnover	\$30 billion

Table 1 - Overview of the UK plastic industry [from British Plastic Federation]

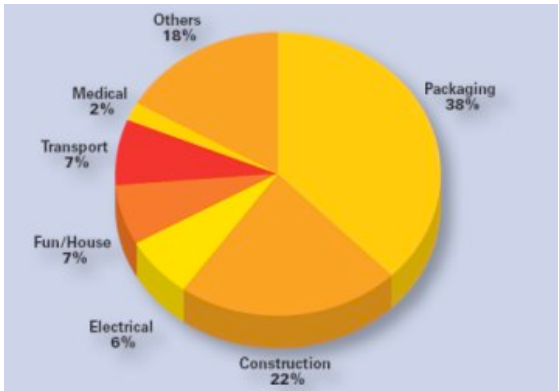
MARKET ENTRY

One traditional method of entry to the UK plastic market is to explore partnerships with local distributors that have the benefit of links and knowledge of the local market. U.S. companies favoring direct sales to buyers may find it beneficial to establish relationships with local buyers through trade shows, conferences or associations. Price is an important factor in most transactions, as buyers have constant pressure to keep their costs down. At the same time, product quality and supplier reliability are key to market acceptance.

CURRENT DEMAND

The UK's plastics processors consume 4.8 million tons of material and are one of the top five processors of plastics in the EU. Figure 2 displays how polymer consumption breaks down by application area in the UK. Packaging remains a strong area of growth with innovation in PET pushing the boundaries of usage, and ready meals and smart packaging creating new opportunities for plastics.

Figure 2: Plastics consumption in the UK by application



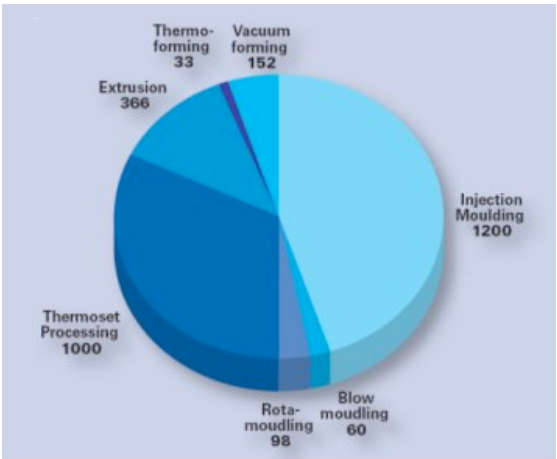
[from British Plastic Federation]

The UK also has a very strong precision molding sector. This section of the industry has been challenged by comparatively high labor costs in the UK. The UK industry has, however, risen to this challenge and adopted new lean manufacturing operational practices and reduced headcount through automation.

The pharmaceutical and medical industry in the UK, although representing comparatively small tonnages of material, is driving strong growth in the UK plastics sector. An analysis of the world's top 100 medicines reveals that, after the USA, Britain's pharmaceutical companies' market share is more than all its European competitors combined.

The plastic electronics sector has been subject to significant interest in the UK in recent years, and opportunities can be found for U.S. companies involved in a range of innovative products such as conformable and rollable electronic displays, ultra-efficient lighting and low-cost, long-life solar cells.

Figure 2: Plastics consumption in the UK by application



[from British Plastic Federation]

A further area of strength is the supply of small-scale processing equipment and ancillary equipment. Assisted processor and ancillary equipment can add significant value to manufacturing and there are many opportunities for efficient, innovative and flexible U.S. companies that are operating at the cutting-edge of technology and are able to respond quickly to their customers' new requirements and ensure that they remain highly competitive in the global market.

The 120 small to medium-sized companies that make up the plastics machinery sector in UK tend to serve niche markets and the focus is on high-quality, small scale processing machines, testing equipment and process measurement, control and ancillary equipment. In addition to this, the industry

has responded to the implementation of stringent recycling legislation in the UK by developing a range of reprocessing technologies and equipment, and it is now a world leader in this field. The UK also boasts a strong materials-testing sector serving the plastics industry, as well as rubber, composites and associated textile manufacturers.

Demand for sustainable plastic materials is increasing in the UK and the UK has also a highly sophisticated recycling infrastructure. Plastics recycling tonnage has increased annually by around 11% per year over the last 10 years. Used plastics have a higher calorific value than coal and, where it does not make economic or environmental sense to recycle it, the UK Government promotes its use in energy from waste (EfW) incineration to provide much needed home-grown energy.

MAIN COMPETITORS

The UK plastic sector accounts for 7% of UK manufacturing activity, greater than the automotive and pharmaceutical industries combined. There are some 7,500 firms engaged in the UK plastics industry of which about 3,000 are 'primary processors', that is companies engaged in the melt processing of plastics raw materials and in the production of semi-finished or finished goods.

The industry has a long and complex supply chain stretching from the producers of plastics raw materials and additives to the end-user (customer industries). Different product groups, for example automotive components and retail packaging, have markedly different supply chains.

In terms of supply of processing machines, the UK has a range of producers supplying most key processing technologies. Companies such as MCP are providing all electric mini-molding machines, while Plastech Thermoset Tectonics is involved in the innovative processing of composite materials.

British companies are renowned for many ancillary innovations that are driving improvement in plastics processing. Firms such as Cinpres Gas Injection lead the world in the application of assisted molding technology - an important technique that is driving plastics into new areas. Joining technology from companies such as Phasa Developments and MSA Engineering is also a notable strength.

The UK boasts a strong materials testing sector serving the plastics industry, as well as rubber, composites and associated textile manufacturers. Test equipment companies such as Hounsfield, Instron and Tinius Olsen have excellent reputations in providing accurate measurement of the physical properties of plastics products down to very precise detail.

Supporting the big names in UK polymer manufacture, for example Ineos, DuPont, LyondellBasell and Sabic, are a range of specialist materials, masterbatch and additives manufacturers, all helping to push the uses of plastics to their technological limits.

MARKET ISSUES AND OBSTACLES

To sell products on the EU market, U.S. exporters are required to apply CE marking whenever their product is covered by specific product legislation. More information can be found at <http://export.gov/cemark/index.asp>. Suppliers that manufacture and/or use chemicals in their products also need to be aware of the Registration, Evaluation, Authorization, and Restriction of Chemicals legislation (REACH) <http://www.hse.gov.uk/reach/>. Companies selling electrical goods in the EU must also conform to the EU legislation for electrical and electronic equipments (EEE), which includes the Waste Electrical and Electronic Equipment Directive (WEEE) and the Restriction of Hazardous Substances Directive (RoHS) <http://export.gov/europeanunion/weeeerohs/index.asp>. A selection of the most important standards applicable in the UK plastics industry can be found at <http://www.bpf.co.uk/Standards/Default.aspx>.

TRADE EVENTS

Name of Event: Interplas

Date: 26-28 September 2017

Location: Birmingham (UK)

Website: <http://www.interplasuk.com/>

Description: For over sixty years, Interplas has been covering all of the manufacturing processes, technologies and services essential to the plastics sector. Held tri-annually, Interplas showcases almost 400 exhibitors and in September 2014 attracted over 10,000 attendees.



CAPITAL Hanoi
POPULATION 89.71 million (2013)
GDP USD 171.4 billion (2013)
CURRENCY VND
LANGUAGE Vietnamese



U.S. Commercial Service Contact Information

NAME Van Doan, Ngo Phuong
POSITION Commercial Specialist
EMAIL Van.Doan@trade.gov
PHONE +84 8 3520 4670
 or +84 4 3850 6163

SUMMARY

The plastics industry is one of the strategic industries in Vietnam. The average annual growth rate is 15-20% in value and over 18.75% in production from 2006 until now. The plastic industry accounts for 4.48% of the country's total industrial production value. It is one of the 10 industries that are favored by the government in order to become a strong economic spearhead, thanks to high and sustainable growth, good competitiveness and high export value.

The nation's plastics industry exports products to 153 countries. Packaging products accounted for more than half of the export revenue, followed by household items (20%), technical plastic goods (15%) and construction plastic parts (15%).

The Government of Vietnam aimed to develop an advanced plastic industry. Therefore, in 2011, the Vietnam Plastics Industry Development Plan until 2020 with a vision for 2025 was approved by the Ministry of Industry and Trade. This plan will raise the industrial production value to VND78.5 trillion (\$3.81 billion) by 2015 and VND181.57 trillion (\$8.81 billion) by 2020. The growth rate of the production value for the 2011-2020 period is anticipated to be at 17.5% annually, and the plastic industry will account for 5.5% of the country's total production value by 2020. It targets an annual export growth rate of 15% in order to reach US\$2.15 billion by 2015 and US\$4.3 billion by 2020.

The biggest obstacle for Vietnam's plastic industry is the heavy reliance on imported raw materials and equipment. Of more than 2.2 million tons used every year, 80% to 90% of raw material is being imported for plastic production. Vietnam imports plastic machinery and equipment mostly from Asian and European countries. The domestic plastic industry has also been hindered by the lack of supporting industries.

This report provides a market overview and trends of the plastics industry in Vietnam, recommendations for market entry and best sales prospects for U.S. suppliers.

MARKET ENTRY

Currently, 1,400 companies within the plastics industry represent the potential buyers of imported material and machinery. Specifically, the most likely prospective buyers of imported materials and machinery are those companies that manufacture hi-tech plastic products and plastic products for export. Foreign companies making direct investments are also potential buyers.

Many U.S. companies set up representative offices and/or distributors/agents to penetrate the Vietnamese market. Local agents and distributors can be invaluable for their existing distribution networks, technical and sales staff, contacts, and relationships with provincial, municipal, and other governmental officials. It is important to provide local agents/distributors with adequate training so that they are able to provide quality after-sales services to buyers.

Representative offices initiate marketing strategies and conduct various marketing activities, including advertising, business promotion, product knowledge training and technical seminars and demonstrations. However, representative offices are not allowed to sell goods directly or sign contracts with customers. Representative offices can only identify potential buyers and negotiate preliminary terms and conditions of sales contracts.

CURRENT DEMAND

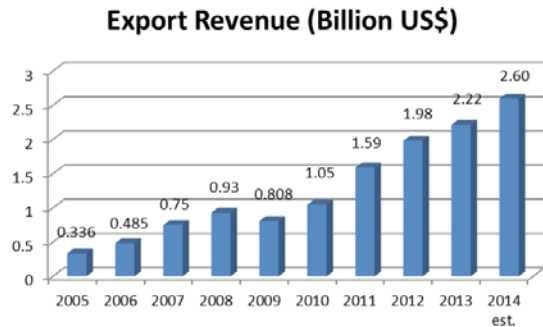
Vietnam's plastic-manufacturing industry sustained a particularly high growth rate, thanks to the increase in both domestic consumption and exports since 2000. The production output rose from 1.8 million tons in 2007 to 4.5 million tons in 2012. The country is targeting an increase in its output to 7.5 million tons in 2015 and 12.5 million tons by 2020. Consumption has grown steadily over the years from 23.2 kilograms per person in 2006 to 42 kilograms per person in 2012.

Vietnam plastic products are now present in more than 150 countries with the ten largest export markets being Japan, the United States, Cambodia, Germany, the Netherlands, the United Kingdom, Indonesia, Malaysia, Korea and France. Japan and the United States are the two big importers of Vietnam plastic products. The export value of the first six months during 2014 to Japan was US\$238.6 million and US\$121.2 million to the U.S. Vietnam's export products include plastic bags, packaging products, technical plastic products and household items. According to the Vietnam Plastic Association (VPA), total export value in 2012 reached US\$1.98 billion, a 25% increase compared to 2011. The total export value in 2013 was US\$2.215 billion, a 13.3% increase over 2012. VPA expects total export value of 2014 will reach US\$2.6 billion, a 16.5% increase compared to 2013.

These days, foreign markets have set tougher requirements on imported plastics products, in which they require more recyclable and degradable material. Priority will be given to high-quality diversification of products. Therefore, the plastic industry is urged to use advanced technology and automated processes. Companies should increase investment in large-capacity production chains to make high-value products.

There are currently about 530 plastic exporters in Vietnam.

Figure 1: Vietnam Plastic Export Revenue in 2005 – 2014 (in billion US\$)



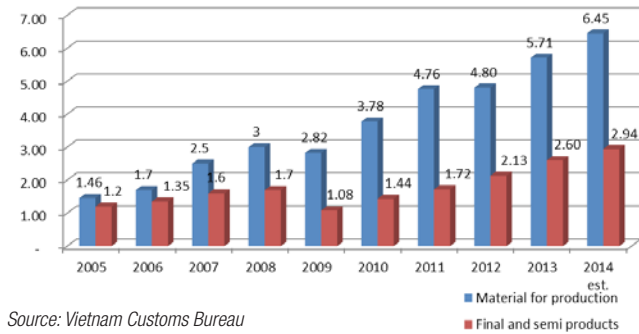
Source: Vietnam Customs Bureau

In order to reach the export targeted value at US\$2.15 billion by 2015 and US\$4.3 billion by 2020 with the increased contribution of advanced technical and construction plastics, Vietnam has to import high-technology machinery and products.

Eighty to ninety percent of raw materials is being imported, equivalent to US\$ 2.1 billion per annum. Vietnam has to import 1.5 to 2 million tons of raw materials annually. However, Vietnam only has three factories producing raw material for the whole domestic industry with total capacity of PVC at 200,000 tons per year, DOP at 150,000 tons per year and PP at 150,000 tons per year. Vietnam's plastic-material imports have been growing at 16% per year in terms of quantity and at 20% per year in terms of import value. The major plastic exporters to Vietnam are countries in the region (including Taiwan, Japan, China, South Korea) and some Europe countries. In 2006, the total amount imported of plastic material was 1.74 million tons, worth nearly US\$3 billion but rising to 2.23 million tons, worth at US\$4 billion in 2012, twice as much as its export turnover.

Vietnam not only imports raw material but also imports most of the machinery and equipment for production. However, more than half of the imported machinery is out-of-date equipment. The total market for plastic machinery in 2012 was approximately US\$450 million, increasing from US\$148 million in 2005. The top four exporters to Vietnam during the period of 2007-2012 were China, Japan, Taiwan and Italy. Imports of plastic machinery from the United States still account for a small portion (US\$3 million in 2012).

Figure 2: Import Value in 2005 – 2014 (in billion US\$)



Source: Vietnam Customs Bureau

MAIN COMPETITORS

At present, demand for PVC and PET plastic materials can be met domestically. There are two PVC manufacturers with a combined capacity of 300,000 tons/year; of which 20% is for export and 80% for local supply. One of the manufacturers is Phu My Chemicals & Plastics Co Ltd, a joint venture between Petro Vietnam, Petronas and Tramatssuco. The other is TPC-Vina Plastic & Chemicals Co., Ltd. For PET plastic material, Formosa Taiwan Hung Nghiep Co., Ltd, a 100% Taiwanese-owned firms produces PET in Vietnam with total capacity of 150,000 tons/year, of which 30% is for export.

For PP, Vietnam Petro Chemicals Group produces 150,000 tons a year, whereas annual demand is 750,000 tons. For EPS, Vietnam Polystyrene Co., Ltd supplies 30,000 tons per year. LG Vina Chemical JV Co. manufactures 30,000 tons a year. There are two BOPP film makers; who are Youl Chon Vina Plastic JSC with the capacity of 12,000 tons a year and Formosa Taiwan Hung Nghiep Co., Ltd with the capacity of 40,000 tons a year.

At present, Vietnam has imported over 30 categories of plastic materials for production; among which PE and PP represent the largest portion. In 2012, Vietnam imported 544,000 tons of PE, valued at US\$775 million and 472,000 tons of PE, worth US\$701 million. Saudi Arabia, Korea, Taiwan, Thailand, Singapore are key suppliers for plastic materials.

Vietnam not only imports raw material but also imports most of the machinery and equipment for production. The total market for plastic machinery in 2012 was approximately US\$450 million, increasing from US\$148 million in 2005. Key suppliers of plastic-manufacturing equipment and machines are China, Japan, Taiwan, South Korea, Germany, Belgium and Italy. Imports of plastic machinery from the United States still account for a small portion (US\$3 million in 2012). Locally-made plastic-production equipment and machinery have a very small market share and are mostly used for the secondary steps in the production lines.

MARKET ISSUES AND OBSTACLES

Since January 2014, import duty for plastic material polypropylene (PP) will be increased from the current level of 0% to 1% in 2014, up to 2% in 2015 and 3% from 2016 onward.

The plastic industry has also been affected by the amended and supplemented Law on Tax Management that came into force on July 1st, 2013. The new law changes tax payment and the tax grace duration for importation of commodities. Under the revised regulations, goods that are imported as feedstock for export processing are subject to a tax payment within a maximum of 275 days. In regard to imported material in this category, a company must pay tax before having shipments cleared or before having the goods released, instead of being allowed to do the customs clearance prior to the tax payment as before. This revised regulation thus discourages producers in the sector.

Other challenges include: a high proportion of unskilled workers, at 70-80% of the workforce; a huge number of small & medium sized enterprises that account for 80%, and the lack of capital to improve production.

TRADE EVENTS

Name of Event: Propak Vietnam 2015
Date: March 31 – April 2, 2015
Location: Ho Chi Minh City
Website: www.propakvietnam.com

Name of Event: VietnamPlas 2015
Date: September 16-19, 2015
Location: Ho Chi Minh City
Website: www.vietnamplas.com/hcm

Name of Event: Printing & Packaging 2015
Date: September 30 – October 3, 2015
Location: Ho Chi Minh City
Website: www.vietnamprintpack.com/hcm

Name of Event: Plastics & Rubber Vietnam 2016
Date: March 1-3, 2016
Location: Ho Chi Minh City
Website: <http://www.plasticsvietnam.com/>

AVAILABLE MARKET RESEARCH

Country Commercial Guide 2014: Doing Business in Vietnam:

U.S. COMMERCIAL SERVICE CONTACT INFORMATION

Name: Van Doan
Position: Commercial Specialist
Email: Van.Doan@trade.gov
Phone: +84 8 3520 4670

Name: Ngo Phuong
Position: Commercial Specialist
Email: Ngo.Phuong@trade.gov
Phone: +84 4 3850 6163



U.S. COMMERCIAL SERVICE OFFICES IN THE UNITED STATES

Alabama

Birmingham

Alaska

Anchorage

Arizona

Phoenix
Tucson

Arkansas

Little Rock
Rogers

California

Bakersfield
Coachella Valley
Fresno
Inland Empire
Irvine
Los Angeles (Downtown)
Los Angeles (Western)
Monterey Bay
North Bay
Oakland
Sacramento
San Diego
San Francisco
San Jose
Ventura County

Colorado

Denver

Connecticut

Middletown

Delaware

Served by Philadelphia, PA

District of Columbia

Served by Arlington, VA

Florida

Clearwater
Fort Lauderdale
Jacksonville
Miami
Orlando
Tallahassee

Georgia

Atlanta
Savannah

Hawaii

Honolulu

Idaho

Boise

Illinois

Chicago
Peoria
Rockford

Indiana

Indianapolis

Iowa

Des Moines

Kansas

Wichita

Kentucky

Lexington
Louisville

Louisiana

New Orleans
Shreveport

Maine

Portland

Maryland

Baltimore

Massachusetts

Boston

Michigan

Detroit
Grand Rapids
Pontiac

Minnesota

Minneapolis

Mississippi

Jackson

Missouri

Kansas City
St. Louis

Montana

Missoula

Nebraska

Omaha

Nevada

Las Vegas
Reno

New Hampshire

Portsmouth

New Jersey

Newark
Trenton

New Mexico

Santa Fe

New York

Buffalo
Harlem
Long Island
New York
Rochester
Westchester

North Carolina

Charlotte
Greensboro
Raleigh

North Dakota

Fargo

Ohio

Cincinnati
Cleveland
Columbus

Oklahoma

Oklahoma City
Tulsa

Oregon

Portland

Pennsylvania

Harrisburg
Philadelphia
Pittsburgh

Puerto Rico

San Juan

Rhode Island

Providence

South Carolina

Charleston
Columbia
Greenville

South Dakota

Sioux Falls

Tennessee

Knoxville
Memphis
Nashville

Texas

Austin
El Paso
Fort Worth
Grapevine
Houston
McAllen
Midland
San Antonio

Utah

Salt Lake City

Vermont

Montpelier

Virginia

Arlington
Richmond

Washington

Seattle
Spokane

West Virginia

Charleston
Wheeling

Wisconsin

Milwaukee

Wyoming

Served by Denver, CO

The U.S. Commercial Service is ready to help you worldwide.
To find the contact in your area, see www.export.gov



In cooperation
with and thanks to



Dedicated to promoting safe living and working environments, UL helps safeguard people, products and places in important ways, facilitating trade and providing peace of mind.

For more information visit: **www.ul.com**